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Chemists' and Druggists' Society of Ireland.
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Assistants' Association of Ireland.
South African Pharmaceutical Association.
Pharmaceutical Society of Natal.
Pharmaceutical Society of the South African
Republic.
Central Pharmaceutical Association of N.Z.
Otago Pharmaceutical Association, N.Z.
Pharmaceutical Society of Queensland.
Pharmaceutical Society of South Australia.
Pharmaceutical Society of Tasmania.
Pharmaceutical Society of Western Australia.

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EXPORT TRADE.

THE increased interest in export trade gives our annual Export Merchant Shippers' Issue special importance this year to manufacturing and wholesale houses who are desirous of extending their business in the British Empire and in foreign countries. The issue will be on March 12. In addition to the regular issue of THE CHEMIST AND DRUGGIST to its subscribers throughout Europe, Asia, Africa, India, America, and Australasia, copies will be sent to all firms in the United Kingdom who have exported any kind of druggists' goods during the past year. Hundreds of merchants file the copy for reference when filling indents, which is the advertisers' opportunity. Those who deal in drugs, chemicals, perfumery, paints, varnishes, aërated water plant, bottles, and druggists' sundries of all kinds should not miss it. For further particulars apply to the publisher.



FOUR Dublin chemists are to amalgamate, sayeth Rumour (p. 300).

SIR WILLIAM CROOKES' views on argentaurum are quoted on p. 316.

MR. HAROLD WYATT'S dispensing notes on p. 306 are a feature of this issue.

WE reply to allegations of our "unreasonable opposition to the Pharmaceutical Society" on p. 314.

A MEETING of the P.A.T.A. to explain its objects to the North London Grocers is reported on p. 319.

AN appreciation of Michael Conroy was given by Mr. Edward Davies at Liverpool last week (p. 303).

CHELSEA chemists have been fined for selling weak inj. morph. hypoderm. and iodine preparations (p. 317).

DR. J. C. MCWALTER communicates physiological notes and practical hints regarding the pancreas (p. 303).

A FIRM who sued for the hire of carbonic-acid tubes detained longer than thirty days failed to make their case good (p. 318).

RUSSIAN pharmacy must be interesting. Mr. P. H. Marsden makes it so in his paper, which we print on pp. 304-5.

MR. POCOCK, of Cape Town, has been reappointed President of the Pharmacy Board there. His portrait and some South African news are on p. 301.

WE give some further particulars regarding the necessity for an import-duty on extracts and similar preparations made with alcohol (p. 312).

OUR Paris correspondent sends an interesting item regarding a cutting pharmacien at St. Etienne, who is despised by his full-price colleagues (p. 301).

A CASE involving the question of the ownership of prescriptions written by a medical man in a chemist's shop has been heard at Birkenhead (p. 318).

A FIRM of mineral-water makers state that out of 176 dozens of empty bottles they discovered that 39 dozens had been used for improper purposes (p. 314).

THE MANCHESTER MALCONTENTS have formed an association to oppose the Pharmacy Bill, and have interviewed some members of Parliament on the subject (p. 299).

DINNERS at Cambridge and Exeter, and of the School of Pharmacy, a dance at Sheffield, and a smoker at Birmingham are the entertainments of the week (pp. 310 and 322).

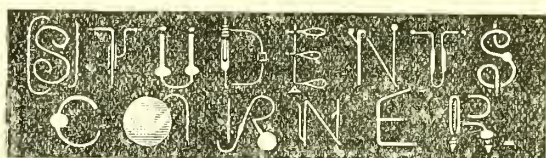
THIS week's market is notable for numerous changes, mostly in the high direction, amongst them citric acid, ginger, quicksilver, saffron, and several fine chemicals (p. 323).

AMONG the Festivities is noted the School of Pharmacy dinner on p. 322, when Mr. Walter Hills rather took the students to task for passing an adverse vote on the new Bill at a recent meeting of the School Association.

PROFESSORS CASH AND DUNSTAN have completed the research on aconitine with the startling observation that aconine (which is aconitine minus the acetic and benzoic radicles) is a complete antidote to aconitine (p. 313).

THE CANADIAN P.A.T.A., known as the Wholesale Druggists' Association of Canada, has collapsed. Messrs. Evans, Sons & Co., alleged that it was not benefiting retailers, and their withdrawal resulted in the decease of the Association (p. 302).

THE COMPANIES BILL has been again referred to a select committee of the House of Lords. Sir J. Lubbock's and Sir C. Dilke's Early Closing Bills may come on for discussion next week; and Mr. Wootton Isaacson has introduced a bill in relation to patenting chemical compounds (p. 320).



CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.C.

QUALITATIVE ANALYSIS.

A MIXTURE of not more than three salts will form the subject of the next exercise in qualitative analysis. The mixture is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a *stamped and addressed envelope*, not a stamp merely) will be received up to Wednesday, February 23, and the samples will be forwarded immediately.

Students' reports will be received up to Saturday, March 5. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

The report on the last analysis will be given next week.



Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Coroner hard on the Chemist.

On February 8 an inquest was held at Prestatyn on a fifteen-month old child, who died through tasting some carbolic acid which had been placed in a saucer for disinfecting purposes. Mr. J. L. Jones, chemist, Prestatyn, said he recommended carbolic acid as a disinfectant on account of its cheapness, and because only a small quantity was required, and Sanitas was more expensive, and he knew the people had no money to waste. The Coroner then asked witness if, for the sake of a few pence, he gave a deadly poison instead of a harmless liquid, and said it was the chemist's duty to have supplied a safe disinfectant in lieu of poison. Witness said he had taken all the necessary precautions in the case. The jury, in returning a verdict of accidental death, said they thought the Coroner was hard on the chemist. They were of opinion that the Legislature should constitute carbolic acid a scheduled poison. The Coroner said that, in reference to his remarks concerning the chemist, he had expressed an opinion, and saw no reason to alter it.

A Lien on the Leg.

The Shifnal Guardians on Monday agreed to provide an artificial leg for an inmate of the workhouse. The Chairman inquired what would become of the limb if the man should die outside the workhouse. The Clerk said he should get the man to sign a declaration not to part with the leg without the consent or approval of the Board. Several members expressed the opinion that the purchase would be a profitable investment by keeping the man out of the workhouse.

The Herbalist's Humour.

Daniel Hampton, of South Road, Bow, is a herbalist by trade, and a humourist by inclination. He was selling drugs in the Broadway the other night when a constable interfered. "Don't be afraid to tread on his feet," Mr. Hampton exhorted the crowd. "They are big enough." Then he added, "The first duty of a policeman is to swear that black is white." After which it was not surprising to see him at Greenwich Court. "Ten shillings or seven days," was Mr. Paul Taylor's comment when he had heard the story.—*Sun.*

The Galen Lodge.

At a meeting of the Galen Lodge, No. 2394, held at Freemasons' Hall on Monday last, Brother M. Carteighe, W.M., presiding, Mr. William Arkinstall, pharmaceutical chemist, 25 Barnaby Gardens, Chiswick, was initiated, and Brother A. J. Phillips was raised to the third degree. Brother Lieutenant-Colonel Probyn joined the brethren at the banquet.

Strychnine-poisoning.

An inquest was held at Glynceiriog on February 10 into the circumstances of the death of Mr. T. Morris, proprietor of the temperance hotel in that village. Deceased also carried on a druggist's shop, and, consequently, would have no difficulty in obtaining the strychnine which was found to have been the cause of his death. A verdict of death by poison whilst temporarily insane was returned.

Chemist and Dog.

Mr. W. Roper, chemist and druggist, Laira, Plymouth, was on February 10 summoned for illtreating a dog. It appears that on January 17 Mr. Roper saw two dogs fighting and belaboured one of them in a manner which seemed to show unnecessary violence, the dog's eye being injured as a result. A policeman said the dog was a vicious one, and Mr. Roper told him he thought it was tackling his cat. He thought the dog would recover. The case was dismissed, as the Bench thought Mr. Roper thrashed the dog under the belief that it was attacking his cat.

A Chemist's Protest.

Mr. James Robinson, pharmaceutical chemist, Northgate, Darlington, has drawn public attention to the fact that in the equipment of the Darlington Technical College between 200*l.* and 300*l.* worth of chemicals and chemical apparatus were obtained without being advertised, although the Town Council some years ago formally resolved that any material they required above the value of 20*l.* must be advertised and tendered for. The firms who supply these goods without any competition have retail shops in Newcastle-on-Tyne, and Mr. Robinson points out that there are in Darlington several chemists, large ratepayers, who have had a thorough training in laboratory-work. The firms who supply the goods, Mr. Robinson adds, are not manufacturers but dealers, and could only procure the same kind of apparatus in a similar manner that a Darlington tradesman would have to do. Mr. Robinson asks for an explanation.

Chemists at Football.

The return-match between the Pharmaceutical Football Club and Muter's F.C. was played on Saturday last at Wormholt Farm. The South Londoners made a good game, but the Square men were too fast for them and won by 3 goals to none. The Pharmaceutical team was composed of Prescott (goal), Jones and Lescher (backs), Happold, Nelson, and Evans (halves), Day, Merrikin, and Owen (centre), Durbin and Warren (forwards). The following was the S.L. team:—G. E. Whysall, J. Johnson, G. P. Thompson, H. M. Roberts, D. F. McKinnell, R. C. Andrews, D. May, S. H. Campion, W. Clay, J. Walton.

Impositions on Chemists.

At St. Helens Police Court, on February 12, a man named Lawson was charged with obtaining 2*s.* 6*d.* by means of a trick from Mr. Charles Cotton, chemist and druggist, Church Street, St. Helens. Prisoner's method was to call on chemists with an order for surgical appliances, representing that he was Mr. Williams, Master of Whiston Workhouse. The goods were ordered to be sent for inspection of the

Guardians on the following day. On leaving the shop he was supposed to discover he had no money for his train-fare, and asked for 2s. 6d. for that purpose. It was afterwards found that the prisoner had no connection with the work-house. The sergeant who arrested him found the prisoner had pursued similar tactics at the shops of Mr. Glover, chemist, Ormskirk Street, and Mr. Fox, chemist, Liverpool Road. Prisoner admitted there were fourteen or fifteen cases of a like nature against him in Liverpool and Manchester, but said he had not been previously arrested. He was sentenced to a month's hard labour.

Birmingham and the P.A.T.A.

A systematic canvass of Birmingham and district is now being made on behalf of the P.A.T.A. The district has been separated into five divisions, each in charge of an honorary secretary, who is to look after the interests of the Association in his particular division. It is hoped that the chemists of the Midlands will thus become a very powerful body for the purposes of the Association.

Chemist sent to Gaol.

At Birmingham Police Court on Tuesday, Theodore Woodhouse (51), described as a chemist, of Ledsam Street, was charged with indecent behaviour in St. James's Road, Edgbaston, on February 13. Prisoner denied the offence, and said he had been a licentiate of the Dublin College of Surgeons, had acted as *locum tenens* to several eminent city surgeons, and had been in the employ of the N.S.P.C.A. for four years. The Stipendiary said he should treat the prisoner as a rogue and a vagabond, and passed sentence of three months' hard labour—the full term of imprisonment he could impose. [The name does not appear on the register of chemists and druggists nor on the medical register.]

Cycling Fatality.

At Canterbury on February 10 an inquest was held respecting the death of Mr. C. Pearson, who was knocked down by a bicycle ridden by a son of Mr. W. H. Paine, chemist and druggist, St. Margaret's Street, Canterbury. The cyclist did all in his power for the deceased, conveyed him home, and obtained medical aid, and promised to pay all expenses. Deceased gradually sank, and died from shock to the system, emphysema, and dropsy. The Coroner said he thought no one could have behaved more humanely or considerately than the cyclist did, and in this the jury concurred.

They Want Convictions.

In consequence of the dismissal by the Justices of prosecutions under the Sale of Food and Drugs Act for the sale of sweet spirit of nitre (reported last week), the Kesteven County Council has decided that in any future case in which the certificate of the analyst is disputed, the Inspector shall be authorised to apply for an adjournment to enable the analyst to be called, and that meanwhile, with the sanction of the Chief Constable, the Inspector shall engage legal assistance.

London Bacteriology.

On Tuesday last the London County Council, on the recommendation of the Main Drainage Committee, agreed to retain the services of Dr. Houston in order to carry out a series of bacteriological experiments in connection with the new filter-bed for treatment of sewage at the Crossness sewage-outfall. The appointment is for one year, and Dr. Houston, who is to give half his time to the work, is to receive 300*l.* and 200*l.* for the expenses of a laboratory and general assistance. Dr. Houston is an assistant of Dr. Klein, the well-known bacteriologist.

Fire at Drug-stores.

A fire broke out in the warehouse of Taylor's Drug Company (Limited), Guildford Street, Leeds, early on Tuesday morning. The fire originated in the basement of the building, and is supposed to have been caused by a spark from the boiler-fire igniting some packing-straw. The fire-brigade were soon in attendance, and succeeded in subduing the flames before they had spread to the upper storeys or to the adjoining property. A large quantity of stock on the ground floor has been damaged, but both stock and building

are insured. The exact amount of damage has not yet been estimated.

Public Dispensers' Association.

Dr. Macnaughton Jones will deliver an inaugural address before this Association at the Bloomsbury Hall, Hart Street, W.C., on February 25, at 8 P.M. The Rules of the Association are now obtainable, and any public dispenser who has not received a copy should apply to Mr. G. F. Foster, hon. secretary, Shuttleworth Club, Fye-foot Lane, Queen Victoria Street, E.C. The annual subscription has been fixed at 2s. 6d.

Warming her Inside.

Mary Ann Cunningham (40), the wife of an Oldham labourer, swallowed twopennyworth of turpentine on Saturday, in order, she said, "to warm her inside." She died the same night.

The Pharmacy Bill.

An association has been formed in Manchester and district for the purpose of opposing the Pharmacy Act Amendment Bill. Several meetings have already been held. Mr. P. Sargeant is the Hon. Secretary. During the last few days a deputation appointed by the Association has waited upon members of Parliament in the House of Commons with a view of gaining their assistance in opposition to the Bill. In this respect the deputation, we are informed, was very successful.

Varied Diet, Chlorodyne Predominating.

On Monday evening, Mr. Troutbeck, the Westminster Coroner, held an inquest on the body of Llewellyn Firkins (36), a law writer, lately lodging at the York Coffee-house, Cursitor Street. The deceased, who was a man of eccentric habits, suffered from a painful internal malady, for which he took almost daily Warner's Safe Cure, chlorodyne, Hunyadi-János, Vichy and potass waters, champagne, cider, tea, coffee, and chocolate. On February 9 he was noticed to be very drowsy, and on the same evening he was found in front of his desk partially unconscious. He died in King's College Hospital at 10.45 P.M. An empty chlorodyne-bottle was found in his office, and Dr. Gardner, of King's College Hospital, said he thought death was due to an overdose of chlorodyne, acting on a system weakened by disease. The Coroner remarked upon the extraordinary variety of things taken by the deceased, and, speaking of chlorodyne, said he remembered a case in which a lady lived for some hours after taking the contents of twelve bottles. The jury returned a verdict of death by misadventure.

Patent-medicine and other Schemes.

Henry Bamford, of Huddersfield, silk-throwster, in the course of his public examination in bankruptcy at Huddersfield, on February 14, stated that he was carrying on a business which yielded profits amounting to 500*l.* per annum. In 1896 he became acquainted through an advertisement with a Mr. E. J. Smedley Norton, who sought a partner in the publication of a novel he was writing. Bamford went to London, read the novel, and consented to lend money to publish it, at 10 per cent. interest and a half share of the profits. The novel had not yet been brought out. After lending Norton 250*l.* he lent him further sums to assist in bringing out a patent medicine. He obtained the money out of some Huddersfield Corporation Stock, which, as sole trustee under his father's will, he sold without the sanction or knowledge of the beneficiaries. The total amount Norton got out of him was 3,000*l.* Another of Norton's schemes was a register of the great advertisers, which had been published, but very little had been received from that source. Another scheme was a small register for grocers' advertisements. Yet another idea was a slate fringed with advertisements, to be fixed in hotels. As far as he knew Norton had used the money in a proper manner, but no profit was made from any of the ventures.

Sale of Morphia.

An inquiry was held by the Manchester City Coroner on Tuesday concerning the death of a constable, who had been found dead in bed in a temperance hotel with an empty bottle, which had contained morphia, by his bedside. Evidence was given by Mr. John Hope, chemist, 332 Deansgate, Manchester, who said that deceased had called at his

shop on Saturday for 2 oz. of oxalic acid "for cleaning his helmet," and a quantity of solution of morphia for insomnia. He was served on finding a witness to the signing of his name. Mr. Hope did not know the deceased nor the witness to the signature. There were other poisons found in possession of the deceased which were not purchased at this shop. The Coroner said the poison should not be served unless the purchaser was known to or introduced by some one known to the seller. The jury were uncertain whether the constable took the morphia for the purpose of producing sleep or of destroying himself.



Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

An Irish Poison-register.

Mr. James F. Wilkinson, of Ellor Street, Pendleton, Manchester, has brought out a "Sale of Poisons Register Book," adapted to the Irish Sale of Poisons Act. Very full particulars of the law are given, and we are told that the book has been edited by one of the best authorities.

A Dublin Chemists' Combine.

Arrangements are being made by four Dublin city and county pharmacists to convert their respective concerns into a limited liability company on the lines followed by a recently-floated kindred corporation. The names of the quartette are freely mentioned in pharmaceutical circles, and they include at least one of the elect of Mount Street. Steps are being taken to register the company, and the prospectus will, it is understood, be issued in the course of a few days.

A Kind-hearted Doctor.

An inquest was held at Mitchelstown on February 11 relative to the death of a Bridget Bourke, who was found by the roadside in a dying condition by Dr. W. P. Connolly on the previous Wednesday. The woman had been deserted by her husband, and had been tramping the country for some time. From the evidence it appears that Dr. Connolly was out driving when he noticed the poor woman lying by the roadside. He immediately stopped, and examining the woman, found her pulseless and dying. The doctor procured brandy, and saw to her removal to the workhouse, where, however, she died the following day as the result of exposure and want of nourishing food. The Coroner highly commended Dr. Connolly for his kindness and humanity.

Prussic-acid Poisoning.

An inquiry was held at Dublin on Friday, February 11, into the death of Mr. J. D. Mooney, described as a chemist (but whose name does not appear on the Irish Register), who was found dead at his residence, 16 Charlotte Street, on the previous Wednesday. The *post-mortem* examination showed evidence of heart-disease and old inflammation of the brain, the latter resulting from a blow received some time ago. The Coroner said prussic acid was one of the remedies for heart-disease, but should never be used except under the advice of a medical man. It was a remedy which might be more injurious than otherwise. The jury found that death was due to prussic acid, but there was not sufficient evidence to show whether it was taken by accident or design.

MESSRS. CHUIT & NAEF, of Geneva, have issued a second circular in reply to the statements made by a Leipzig house regarding their heliotropol, a synthetic soap-perfume which has found much favour. Statements have been made by the Leipzig house which the Geneva one has now disproved, and the integrity of their synthetic perfumes remains unblemished.



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Kinninmont Prize.

The syllabus of this competition has been issued, and copies may be had on application to the Secretary, Mr. W. L. Currie, 223 Byres Road, Dowanhill, Glasgow. The principal subjects are botany, magnetism, and electricity, and intending competitors must send in their names to the Secretary before the end of April.

The Edinburgh Pharmacy Golf Club.

The captain of this club, Mr. Thomas Welsh, has left Edinburgh to fill a position in Messrs Savory & Moore's establishment in London. Mr. Welsh comes of good athletic stock, having a brother who is an international football player, and another who is at present half-mile and one-mile Scottish champion, as well as record-holder.

Chemist's Store-room burnt.

On February 3, considerable damage was occasioned by fire to a store-room at Hopetoun Lane, Bathgate, used by Mr. D. Reid, chemist, Hopetoun Street. The store-room is the top flat of a tenement house, and the fire occasioned considerable alarm among the people living in the lower flats and adjoining properties.

The Distillers' Company (Limited).

To commemorate the opening of their new premises in Torpichen Street, Edinburgh, a dinner was given by the directors of the Distillers' Company (Limited) to a representative gathering of their officials. Mr. W. D. Graham Menzies (chairman of directors) presided, and was supported by the majority of the directors. An elaborate dinner was provided, to the accompaniment of a pleasing selection of orchestral music. After dinner the usual toasts followed. "The Distillers' Company (Limited)" was given by Mr. W. Stuart Frazer, W.S., and acknowledged by the Chairman. "The Directors," "The Staff," and "The Agents" were also toasted, and the proceedings were throughout of a most enjoyable character. Amongst the many facts mentioned in the various speeches as showing the magnitude of the business we note the allusions to the increased growth of the



company's new industry—viz., the manufacture of malt-extract, D.C.L. brand, which is being vigorously pushed by extensive advertising. It was stated that 400,000 qrs. (of 448 lbs. each) of grain were used annually, the company's production of spirit being equal to about one-fifth of the total quantity made in the United Kingdom. To illustrate the confidence which the public have in the company, it was pointed out that the 10% shares fully paid were now quoted at 23½, while the number of shareholders was 2,347. The enlarged offices—a front elevation of which we reproduce—are prominently situated in the main thoroughfare forming

a continuation of Princes Street, and have an imposing architectural appearance. On the top flat three apartments are completely fitted up as a chemical laboratory, which is fully equipped with the most advanced apparatus for the analysis of the raw and manufactured materials used and produced by the company. The general laboratory is used principally for the malt-extract and yeast department and for the conduct of experimental work. Opening off the general laboratory is a smaller room for photographic and polariscopic work, and provided with means for using daylight or monochromatic light at will. In the third room bacteriological investigations are conducted, and it contains, amongst other apparatus, a powerful microscope, fitted with a battery of the highest-class apochromatic objectives. Photomicrographic work is also carried on, a specially-arranged camera being used for vertical work, and a powerful arc-light, fitted with condensers, giving the illumination necessary for instantaneous exposures.

Liquefaction of Aluminium (?)

Some amusement as well as irritation has been caused among Dundee chemists by the rather free sale of our old friend liq. hydrargyri nitratis acidus (modified and tinted with pot. bichrom.), the materials for which were coolly obtained from one of themselves, and which was exploited and demonstrated by a wily foreigner as a simple, novel, and effectual preparation of aluminium for plating metal goods, bicycles, &c., and to be retailed at 1s. per ounce bottle. The vendor of this aluminium tincture has been arrested by the police.



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St. Winefride's Well.

Father Beauclerk, who has done much towards making known the virtues of St. Winefride's Well at Holywell, is vigorously protesting against the proposal of the Holywell Urban District Council to grant the right of bottling the waters for table-purposes.

Chemist Summoned for Assault.

On February 12, at Colwyn Bay, Mr. W. H. Roberts, pharmaceutical chemist and treasurer of the Liberal Club, was summoned by Mr. E. Evans, contractor, for assault and battery. There was a cross-summons. Both parties pleaded not guilty. It appears that the North and South Wales Bank premises, next door to the Liberal Club, are being extended so as to take in the rooms on the ground floor of the club, and it is alleged that Mr. Evans, the contractor, in carrying out the work trespassed on the club premises which led to his being assaulted by Mr. Roberts, who is tenant of the club as representing the committee. Before the case was opened, Mr. Nunn for Mr. Roberts raised the question of jurisdiction, which ultimately led to the case being adjourned till the next court, when evidence will be produced regarding the question of title, which arose in the case.

French News.

(From our Paris Correspondent.)

RADIOGRAPHY IN THE PARIS HOSPITALS.—As the result of a proposal made by M. Ambroise Rendu it is probable that a service of radiography will be established in the hospitals belonging to the City of Paris.

THE SCANDAL AT THE SCHOOL OF MEDICINE here, to which reference has already been made in the *C. & D.*, has

been the subject of a searching inquiry on the part of a Committee of Discipline, which amounted to a rehearing of the case. The result is that the incriminated professor, M. Heim, who was accused of the misappropriation of a number of drugs, botanical specimens, scientific instruments, books, &c., has been cleared of the charge of theft. On the other hand, the accusation of grave negligence in the exercise of his functions as professor is maintained, and the Superior Council of the Paris University has decided finally that his connection with that body must cease.

THERE WAS A FIELD-DAY for pharmaciens a week ago at the police court of St. Etienne. Never within the memory of man had so many assembled at the hearing of any lawsuit in that town. The occasion was the prosecution of a cutting pharmacist, and to some extent a sequel to a case tried in Paris last July against M. Poirson, who, trading as the "Société des Grandes Pharmacies de France," had opened a large cutting pharmacy in Paris and several in the provinces. It was the St. Etienne branch that was the object of the present lawsuit. This business, situated in the rue de Foy, was bought six years ago by a M. Brix as the "Pharmacie moderne," but trade was slow until in 1894 M. Poirson took the business over, altered the shop frontage, re-christened the pharmacy as a branch of the "Grandes Pharmacies," and began a system of cutting, accompanied by clouds of prospectuses promising high quality of drugs at a minimum price. He arranged with M. Brix to remain in charge as manager and proprietor in name. The business prospered in its new form, but the local committee for inspecting pharmacies kept a severe eye on it and pounced down on any approach of irregularity. For instance, there was a notice on the shop window that all medical prescriptions were made up by pharmacists with diplomas. Dr. Granjonrozet, the president of the committee of inspection, called one day and requested to see the diplomas of the various assistants, but M. Brix was the only person in possession of the qualification. The result was that a few days later the writing on the window was changed, and the public learned that the prescriptions were made up by "experienced assistants." The lawsuit in Paris caused the plural to be dropped from the name of the pharmacy, and it became the "Grande Pharmacie de France." So far there was no direct infringement of the law; but M. Brix at last advertised such low prices that the annoyance of his competitors became coupled with suspicion. Subsequently one of the members of the committee, M. H. Tardivi, received an anonymous letter stating that various medicaments were prepared in a very "economical" way at the "Grande Pharmacie." The letter added that manuscript formulæ were kept for making up preparations similar to those in the codex without using the proper drugs. M. Tardivi then obtained some medicine from M. Brix, which he afterwards analysed. He came to the conclusion that fraud was being perpetrated, and took steps for police intervention. Numerous samples were taken by the committee, and sealed by the Police Commissary. These were afterwards sent to M. Cazeneuve, expert chemist and professor at the Lyons School of Pharmacy, for analysis, who reported unfavourably regarding them. In the action which followed expert evidence was given against the defendant, and two of his former assistants also gave damaging testimony. The Judge has, however, reserved his decision. It should be added that, according to the defence, the charges against M. Brix appear to be largely based on information given by a former assistant from motives of vengeance.

South African News.

(From our Correspondents.)

A NEW START.—Mr. A. S. Smith, late manager of the Golden Mortar Dispensary, Johannesburg, has, as A. S. Smith & Co., commenced business at the corner of Rocky and Davies Streets, New Doornfontein, Johannesburg.

THE CAPE PHARMACY BOARD, as now constituted, consists of three elected members—Messrs. Wm. F. H. Pocock, W. H. Helmore, and F. W. C. Thomas—one Colonial Medical Council representative, and two Government nominees, Messrs. A. Walsh and J. A. Matthew, the last-

named having been appointed in the place of the late Mr. A. Cleghorn. Mr. Pocock has again been elected President of the Board. We give his portrait from a recent photograph. He is a son of Mr. Lewis Greville Pocock, chemist, and was born at George Town, Cape of Good Hope, forty years ago. When 15 he was apprenticed to his uncle, the late Mr. J. T. Pocock, Cape Town, and in 1877 came to England to study at the South London School of Chemistry and Pharmacy under Dr. Muter. He passed the Minor in the following year, and was admitted a partner of J. T. Pocock & Co. At "Muter's" he carried off the Senior Chemistry Medal, and in February, 1879, passed the Major,



and returned to the colony to take charge of his firm's business. He took a prominent part in the framing and passing of the Medical and Pharmacy Act of 1891, and when that measure became law he was nominated by the Colonial Secretary as one of the Government representatives on the Colonial Pharmacy Board, while his colleagues elected him President, in which position he has just been placed for the third time. Mr. Pocock is also President of the newly-formed Pharmaceutical Society of Cape Colony; Justice of the Peace for Cape Town, Simon's Town, and the districts thereof; as well as Worshipful Master of the Good Hope Lodge, the oldest Masonic Lodge in South Africa. He was Mayor of the municipality of Rondebosche for several years, and is at the present time Mayor of Kalk Bay, the chief health-resort in South Africa.

POLE, LEDIKER & CO.'S BANKRUPTCY.—The adjourned meeting of the creditors of this drug-firm was held at Johannesburg on January 21, when a claim for 244*l.* 12*s.* 7*d.* on behalf of Messrs. Lennon & Co. was put in. The trustee reported that the assets consist of stock and fixtures of the drug-stores of the firm at Braamfontein, Germiston, and City and Suburban; a quantity of stock in the possession of Mr. E. Lediker; stock held by Messrs. Petersen & Co., which has since been taken over by them at a valuation of 200*l.*; stock removed by the officer of the Court, and sold by auction; and outstanding debts 207*l.* 3*s.* The liabilities of the firm amount to 1,410*l.* 10*s.* 7*d.*, and the total claims to 1,639*l.* 3*s.* 7*d.* As there is not much, if any, demand for druggists' stock, the trustee feared that a very small dividend would be paid. Mr. Miles Walker Pole, one of the partners, was examined as to the lease, which he promised to hand over. He admitted that the firm was in financial difficulties when they gave Messrs. Petersen & Co. the bond for 500*l.* under which they ultimately secured the stock above mentioned. Shortly before the insolvency he removed goods from the Braamfontein store at the instance of Mr. Lediker, who was responsible to Messrs. Bargoyne & Co., of London, for the 670*l.* which the firm owed them. Their creditors were pressing them hard, and Lennon & Co.'s solicitors got

judgment against them for 130*l.* Bankrupt having been examined as to a bond which his firm gave to Petersen & Co., the trustee's report was on motion adopted.

Colonial and Foreign News.

OVERLAND PARCEL-POST TO INDIA.—Since February 1 parcels by post between the United Kingdom and India can go by the overland route across Europe at a somewhat higher charge than carriage all the way by sea.

THE ANNUAL MEETING of Parke, Davis & Co., Detroit, Mich., was held on January 18. The report submitted showed the volume of business for the past year to have been greatly in excess of any previous year since the company was organised. The old board of directors was re-elected, and Mr. William Warren was reappointed managing director.

A SPONGE TRUST with a capital of \$1,000,000 has been spoken of in St. Louis, Mo., and it was to embrace the whole world too. A gifted American reporter who rarely uses a sponge must have got the story up, for none but such a genius could cover the whole sponge world with \$1,000,000—too little to buy up or even "nobble" the London sponge merchants.

THE MANUFACTURERS' ASSOCIATION OF AMERICA met in New York last month, and finished up with a dinner, at which 966 persons attended, representing industries which produce \$9,000,000,000 of manufactures annually. The Association was asked to adopt the metric system, but the Chairman of the committee pointed out that the expense of making new gauges and tools in changing from the present standard would be enormous, and the Association accordingly decided not to adopt the report of their committee.

PHARMACEUTICAL SOCIETY OF NEW SOUTH WALES.—At the meeting of this Society on December 7 the President (Mr. L. P. Williams) deplored that so little interest was taken in the Society, as that meeting had almost lapsed for lack of a quorum, although it had been specially convened in order to decide finally whether the Society should be registered or not under the Companies Act. It was agreed that the Society should be so registered, and the President was authorised to carry the matter through.

ATTFIELD IN PHILADELPHIA.—At a meeting of the Philadelphia Drug Exchange, held last month, Mr. M. N. Kline presented to the Exchange an Indian paper proof of Herkomer's portrait of Professor Attfield. The picture had been on view in the Exchange offices for some time, and is greatly admired. During the course of his address Mr. Kline called attention to the debt (\$75,000) on the Philadelphia College of Pharmacy, and expressed the hope that it would be paid off before their next annual meeting.

WHOLESALE DRUGGISTS' ASSOCIATION OF CANADA.—This combination, which was formed to control cutting something after the style of our P.A.T.A., has collapsed. At the general meeting, held in the Windsor Hotel, Montreal, on February 1, when the business had been discussed, Mr. Alfred B. Evans, managing-director of Messrs. Evans & Sons, stated that, although he wished the Association better success in the future, he had, after careful consideration, decided to sever his connection with it. Subsequently Mr. Evans gave our correspondent his reasons for this action. First, he said, the firm joined the Association because they had been assured that it would be of benefit to retail druggists as well as to wholesale firms. As a matter of fact it had not advanced the interests of retail men. Second, the principles of the Society prevented individual members from exercising their private judgment, every member being compelled to act in accordance with any written instructions the President might choose to send him. Third, some of the members repeatedly broke the rules of the Association, and thus obtained an unfair advantage over their more honourable competitors. This, Mr. Evans thought, rendered the combination useless. Although Mr. Evans had no intention of breaking up the Association, it was unanimously decided by the members present that the Wholesale Druggists' Association should cease to exist on and after February 5, 1898.

The Winter Session.

PHARMACEUTICAL SOCIETY OF IRELAND.

A MEETING of the Society was held on February 14 at 67 Lower Mount Street, Dublin, at 8 P.M. Dr. J. C. MCWALTER read a paper on the

PHARMACY OF THE PANCREAS,

and began by alluding to the experiments on the digestive process lately conducted at the St Petersburg Imperial Institute. Previous knowledge of the physiology of digestion was largely due to Claude Bernard, pharmacist, whose theories the remarkable series of experiments just concluded confirm, and on some obscure points throw more light. One of the facts elicited was that white of egg and starch could not be digested when introduced into the stomach through an artificial opening, or, in other words, the peptic juice necessary to render soluble such substances was only secreted under the stimulus of desire or hunger. Fat was found to check the digestive solution of other articles of food. This experiment showing that the stomach does not digest fat was the one to which the lecturer drew attention, as it showed that any artificial auxiliary to the assimilation of fat must be sought in some other gland. The function of the pancreas as the means by which fat was assimilated was undoubted, and pharmacists were urged to devise some method of exhibiting the secretion in cases of wasting diseases depending on the non performance of its functions. The fluid secreted by the pancreas contains at least four ferments—trypsin, steapsin, amyllopepsin, and rennet—in addition to internal secretion about which little is known.

Trypsin, like pepsin, converts proteids into peptones, but acts best in alkaline solution. The action of pepsin was more in the nature of gelatinisation, whilst trypsin acted as a corrosive. Amylopepsin possesses properties similar to the diastase of malt and ptyalin of saliva, but is more energetic. It acts either in alkaline or neutral solution and with a trace of acid. Steapsin emulsifies the fatty constituents of the food and renders them more ready for absorption by the lacteals. Rennet differs from the milk-curdling ferment of the peptic juice, in that the latter precipitates the acid albumen from the milk so as to render it soluble in the gastric juice, whilst the rennet ferment precipitates the proteid of milk casein.

THE PROBLEM FOR PHARMACISTS

is how to abstract these ferments from the glands of animals and exhibit them in their greatest activity. The difficulties are increased when it is borne in mind that experiments show that when pepsin and pancreatin are mixed together they destroy each other's activity. The method the lecturer favoured was to macerate the fresh gland, while still warm from the animal, in warm sterilised glycerine solution containing 1 per cent. of sodium carbonate. After macerating for about three hours the glands are pressed, and the juice strained and bottled, after adjusting to such a strength that 1 oz. equals 1 oz. of fresh gland, or that 5j. added to 20 gr. of sodium carbonate in 5v. of water, when added to a pint of milk and let stand for half an hour at a temperature of 140° F., will digest so that a little heated with nitric acid shows no trace of unconverted albumen. The method of macerating in a mixture of water and spirit yields a palatable mixture, but one that keeps badly; if, however, a mixture of glycerine, spirit, and water is used, a better result is obtained.

PANCREATIN IN POWDER

is prepared by precipitating an aqueous extract by alcohol and drying the product. This keeps fairly well, and when mixed with sodium bicarbonate exhibits considerable activity. The care necessary to get the best effects from pancreatic powders for digesting foods was pointed out, and the necessity of stopping the process before bitterness has developed mentioned. The method of digesting the pancreas in a solution of pepsin with hydrochloric acid, suggested at the International Pharmaceutical Congress at Brussels last year, was most effective in yielding a definite and palatable powder, but the resultant requires more investigation. Pep-

tonised beef jellies are made by converting the fibrin of beef partially or wholly into peptones, and are useful for rectal administration. Keratine-coating the lecturer considered of doubtful advantage, as pills coated with this substance were by no means certain of solubility. It is important to administer pancreatic preparations shortly before starches or fatty bodies, and always in alkaline solution. The lecturer considered that if an emulsion of cod-liver oil with pancreatic juice could be prepared in a satisfactory way, it would be an ideal manner of giving the oil. His (the lecturer's) experiments had not been successful in this direction; the best formula he had found was the one given in Remington's "Pharmacy."

THE LIVERPOOL CHEMISTS' ASSOCIATION.

THE usual meeting was held at the Royal Institution on February 10, the President (Mr. John Bain) in the chair.

MAIZE OIL.

Referring to the sample of this oil exhibited at the last meeting by the Secretary, Mr. R. C. COWLEY said he had since heard from a traveller in Peru that the natives in making a fermented liquor from maize produced an oil which was highly esteemed. He understood that the old women of the villages first chewed the maize and then it was allowed to ferment in open vessels.

Mr. EDWARD DAVIES said the intoxicating liquor from kova kawa was made in the same way, but he understood the Pacific islanders preferred the young maidens of the village to attend to the initial processes.

It was remarked that although maize oil was used for soap-making, it was also used for adulterating lard. The iodine test was perhaps the best for it, as it had a high iodine value.

Mr. EDWARD DAVIES then read an appreciation of the late

MICHAEL CONROY

which he had prepared at the request of the Association at its last meeting. Mr. Davies said:—Among the results of advancing years, one of the most sorrowful is the loss of friends. Other gaps may be filled, other losses retrieved; but the opportunities for forming new friendships are not likely to occur. The new generation springing up around us have new training and new aims. Their sympathies are with men of their own time, and if they do not look upon their elders as veterans who "lag superfluous on the stage," they naturally consort with comrades of their own age. Such thoughts as these filled my mind as I attended the funeral of one with whom my intercourse had extended over many years, and who might have reasonably expected to have rather followed me to my resting-place. When I was asked to say a few words to you this evening, such thoughts as I have mentioned returned to me with redoubled force, as I remembered how recently a similar task was laid upon me, when I endeavoured to bring before you a sketch of the work of another of your members, who, like Mr. Conroy, was my junior, and who, like him, was cut down when many years of life and work might have been hoped for. My acquaintance with Mr. Conroy was largely confined to his public life. Various causes prevented me from enjoying the private relations that I had with Mr. Mason, but, so far as I had the privilege of knowing him, none but pleasant memories exist. At all times I found him ready to impart any information with regard to the wide field of practical pharmaceutical chemistry of which he possessed such extensive knowledge, and especially in the difficult branch of that science which deals with the analysis of organic compounds, Mr. Conroy also added to our knowledge. He devised new methods of analysis, improved processes of manufacture, and condensed the stray fragments of information on various subjects into papers in which the work of many labourers in the field of science was brought together so as to be available for practical use. Mr. Davies then gave the following list of Mr. Conroy's contributions to pharmaceutical chemistry, which Mr. Wyatt had helped him to compile:—

Analytical.

- 1881. Test for the purity of olive oil.
- 1883. Scammony: a new adulterant.
- 1884. The assay of opium. (Adopted in the E.P. 1885.)

1888. Lard : its adulteration with cotton-seed oil and detection thereof.
 1889. Castor-oil adulteration.
 1891. A note on proposed method of standardising the extract of nux vomica and opium.
 1893. Note on the sp. gr. of sandalwood oil.
 1897. Adulterated copaiba.
 1897. The purity of oil of rose.

Processes.

1879. An improved formula of liquid extract of cinchona.
 1886. Linimentum terebinthinæ
 1891. Mistura olei ricini.
 1891. A note on extractum euonymi siccum
 1892. Collodium belladonnæ.
 1896. Extract of malt.

General Papers.

1879. *Fucus vesiculosus* : résumé of history.
 1883. Sesame oil : report on its suitability for pharmaceutical purposes.
 1895. Leaflets and leaf-stalks of jaborandi.

Many of the above were communicated to the Liverpool Chemists' Association, and on few subjects brought before us did Mr. Conroy fail to throw fresh light. In the course of some concluding remarks, Mr. Davies said:—Mr. Conroy, so far as I can learn, owed most of his knowledge to his own efforts and reading. In the present day there is far too much reliance on machinery, but, after all, an ardent student will learn more, and certainly do more, by remembering that, unless there be the receptive power, and that be hard worked, the whole resources of a university may be employed in vain. With that power and hard work limited means will do wonders. I do not depreciate the advantages of well-fitted laboratories and every aid that ingenuity can suggest, but I earnestly warn the student against trusting to them alone.

Dr. SYMES said that the labours enumerated did not by any means represent the labours of their late friend, as he was always contributing quietly and unostentatiously to them all. Mr. WARDLEWORTH, as one who had known him for twenty years, said that the juniors in the calling were sincere in their expressions of sorrow, as Mr. Conroy had endeared himself to them by his approachability. His sympathy for the student was keen, and his help prompt and willing. Messrs. A. C. ABRAHAM, A. H. SAMUEL, and J. T. HORNBLOWER bore eloquent testimony to the worth of the Society's late member.

On the motion of the PRESIDENT, a vote of condolence was passed to the family of the deceased.

MR. PROSPER H. MARSDEN, F.C.S., read a paper on

THE PRACTICE OF PHARMACY IN RUSSIA.

He mentioned that in earliest recorded days the healing art in Russia was in the hands of wizards, wolfmen, sorcerers, and seers, who were the physicians, surgeons, prophets, and historians of their day. Little is known of the Scythians, who then inhabited the country, but at "The Hermitage" museum in St. Petersburg there is a valuable collection of Scythian relics, including a vase of "electrum," probably of Greek manufacture. Upon one side of this is a scene depicting a chieftain consulting a wolfman, on another a surgeon examining a man's jaw and on a third a limb being bandaged. The vase probably dates from 400 to 350 B.C., and is the oldest record of the healing art in the Empire. Twelve hundred years later Christianity came into Russia, from Byzantium, and, along with it, arts and medicine. The Kieff Monastery was the earliest seat of learning, and its monks soon became noted for their successful treatment of disease, superseding the wizards and wolfmen. Towards the end of the fifteenth century many foreigners had found their way into the country, and amongst them physicians, whose lives do not appear to have been exactly happy. For instance, Master Leo, a Jewish physician, was induced to undertake the cure of Ivan, the Czar's eldest son, of gout, and to stake his head upon its certainty. He hadn't a head six weeks later. Another eminent practitioner, named Anthony, had been attending a Tartar prince, who died, and Anthony was handed over to the angry relatives. They first tortured him, and then "took him to the River Moskva, under the bridge in winter, and cut him in pieces with a knife, like a sheep." In the account of the

death of Ivan the Terrible, by the Englishman Horsey, it was mentioned that when the Emperor fell in the faint of death there was a "great owterie and sturr; one sends for aqua vita, another to the oppatheka (Russ. apteka), for maregold and rosewater, and to call his gostlie father and the phizician. In the meantime he was strangled and stark dead." Such was the pharmacy of that day, which is further illustrated in a graphic account given by Horsey of the death of Dimitri, the son of Ivan the Terrible. He tells of being roused at midnight by a messenger from the Court begging him to send some medicine to counteract the poisoning of the Empress. "Iran up, fetchinga littell bottele of puresallett oeyell and a box of Venice treacle." It was during the reign of Ivan the Terrible that the Ministry of Medicine was inaugurated, and, under the ægis of this Government institution, the first apteka or pharmacy, was opened in 1581. This apteka was at first merely a central store for the distribution of medicine to the Court.

THE FIRST PHARMACY IN RUSSIA

was opened by an Englishman, but little is known of him beyond the name—James Frenchman. Owing, doubtless, to the oppressive treatment he received at the hands of the Russians, Frenchman, soon after founding the first apteka, left Moscow, and returned to his own country. Correspondence took place between the Czar and our Queen Elizabeth, in consequence of which Frenchman returned to Russia, and took with him a collection of drugs, a list of which, containing the names of no fewer than 164 drugs and preparations, is still extant.

In the Ministry of Medicine, to which the apteka was attached, there were several classes—the physicians, surgeons, aptekars, or apothecaries connected with the Court apteka; and under them were alchemists, distillers, pupils, collectors of herbs, oculists, barbers, blood-letters, bone-setters, and undertakers. A new apteka was opened, which sold drugs and preparations to the army and to private individuals, and which also had to care for the public health by preventing the spread of infectious diseases. The medicaments for the personal use of the Czar were kept under lock and seal by the Secretary of the Ministry, the drugs themselves being in sealed bottles and boxes. Should his Majesty require medicine, the physician's prescription was submitted first to the Ministry, and was then presented as an official paper to the Czar, who gave the order for its preparation. It was taken to the apteka, and prepared only by the most trusted dispensers. When finished it was tasted, firstly by the prescribing physician, secondly by the President of the Ministry, and lastly by the high Court official.

Not only did the aptekas provide medicines, but in earlier days they furnished such items as 10 lbs. of good amber to the Patriarch of Moscow for the preparation of the Chrism, and in later times they provided aniseed and other aromatic substances for the preparation of the strong spirituous liqueurs or vodkas, and even varnish and paints for the Imperial yacht. These were the days of polypharmacy, and in the medicine-chest which accompanied Alexis in one of his journeys to Troitsa we find amongst the oils, elixirs, essences, syrups, salts, powders, and plasters a "syrup of colt's hoof," a "spirit of worms," "spirit of ants," and a "balsam of unicorn's horn." In 1655 three unicorns' horns were offered to the apteka in Moscow for 10,000r. (say 6,000l. nowadays); ultimately the vendor was offered 5,300r.—rather a valuable article of materia medica. The horn was probably that of the rhinoceros, and it was taken in a state of powder as a prophylactic and specific for fevers, pestilence, and snake-bites, and it was said to be a certain protection against smallpox, dysentery, and the plague. Benzoar stones were also in great request. Nearly all the drugs used in Russia at this time came from abroad—Germany, Holland, and England, chiefly from the last—the newly-opened port of Archangel being the great market for English drugs.

It was not till the time of Peter the Great that the first hospital and school of medicine were opened in Russia under the direction of Dr. Nicolaus Bidloo, Peter's own body-physician. Accommodation was provided for fifty students in this school, and the subjects of anatomy and apothecaries science were taught, the latter including botany, pharmacognosy, pharmacy, and pharmacology, and the London

Pharmacopœia appears to have been used. Russia, so much behind Western countries in some respects, has the most

STRINGENT PHARMACEUTICAL REGULATIONS

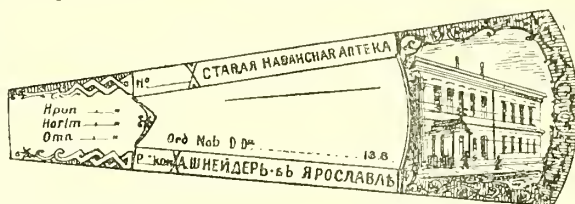
of any country in the world. A candidate desirous to learn "the art and mystery of the apothecary" must have passed into the fifth class in the Government school or gymnasium. He serves three years without premium, and receives a salary of about 10r. or 18r. (32s. to 57s.) per month the first year, rising about 2r. each year. The apprentice lives in, and is allowed off on alternate Sundays and a few hours one evening each week. In the old days the pupils were called "disciples," had no salary, were fed and clothed, and at the end of their time received a complete outfit and a present of some hundred roubles. This is still generally given, either at the option of the employer, or it may be specially provided for in the indentures. During the three years the apprentice will study the theoretical part of his work, and at the end of the time passes the assistants' examination. After another three years served as an assistant in a pharmacy, which must not be in a village, he may enter for the qualifying examination of "provisor." This is generally taken about the age of 25 or so, and before entering for the examination he must put in a two-and-a-half years' course at a university, this being usually done during the assistantship. One would think that with this lengthy course of study the aptekar would be allowed his freedom from military service. Such, however, is not the case; but if he has taken the qualifying examinations before being called upon for military service, the period of such service is shortened.

THE OPENING OF A NEW APTEKA

is attended with some difficulty, for the aptekar must show the local authorities that the population has increased to an extent sufficient to justify such an opening. This is a rule which is pretty general in continental countries, and prevents the overcrowding of towns with shops of one kind, which is so noticeable in England. The medical department, which is under the Ministry of the Interior, looks after the welfare of pharmacy, prevents overcrowding, examines periodically the registers of subscriptions, and fixes a maximum tariff of prices for drugs. For the highest rank in pharmacy—that of "magister"—the candidate is required to have been three years a provisor, to have passed four years in a university, and to defend a dissertation with at least six theses! The magister of pharmacy takes equal rank with M.D. in civil and military practice. After an apprenticeship female candidates are allowed to go on to the assistant and provisor examinations. They are not allowed to receive their instruction in a public apteka, but must obtain it privately, and an aptekar taking female apprentices and assistants must not employ male assistants. In 1888 there were 2,518 public aptekas in the Russian Empire, dispensing an average of nearly 5,000 prescriptions each annually. The vast apteka of K. J. Ferrein in Moscow may be taken as an ideal Russian pharmacy (THE CHEMIST AND DRUGGIST, August and September, 1888, and July 29, 1893). There are dispensed here annually 300,000 prescriptions at a price to customers of about 2s. each. Some 300 men are employed, of whom 123 are qualified. Twenty men are employed in the sale-room, and twenty-eight provisors in the dispensary. Poisonous drugs are handed to the compounder, and the weights checked by one of two aptekars specially appointed. The greatest care is taken in the average apteka. A prescription is handed to an assistant in the sale-room, who hands it to a provisor, who reads it and states how long it will require to make up. A receipt is given with a number, and you are requested to return in a quarter, half, or one hour, generally the latter. At the appointed time you return, present receipt, and obtain your medicine, the prescription for which is copied upon the reverse of one of the curious fan-stick shaped labels which they use, while the original is retained by the apteka.

Night-duty is taken by assistants in turn. On the mat inside the apteka-door sleeps the night-porter, and, beside him, a dog. You ring bell, he lets you in, and rouses the man on duty, who dispenses your medicine. As an example of the crass stupidity of the Russian "mujik," or peasant class, during the recent cholera epidemic a medical student

who had been to visit a village patient, and wished to prescribe for the case, asked the "mujik" for pen and paper. Neither was to be had in the village, and the woman was dying. The doctor, being a man of some resource, had the door of the "izba" (hut) taken off, and, with a piece of chalk, wrote his prescription upon it. The peasant harnessed his "telega" (cart) and took this most original prescription to the nearest apteka, thirty miles away. Mr. Marsden showed a selection of the labels in common use in Russia, one of which we reproduce.



The labels are fixed upon the bottle by means of an adhesive label bearing the words "For internal use," "For external use," as the case may be; or they may be tied on with the bottle-cap (Hunt's bottle-caps are much used in Russia), and the string sealed upon the narrow end of the fan-stick label. Powders, cachets, &c., put up in boxes, have the labels shut in with the lid and wrapped round the box. The papers are smaller than those in general use here, and have the name of the apteka upon the back. It is a common practice to mark prescriptions containing dangerous poisons "Not renewed without the doctor's signature." The painful fact must be recorded that even in a country so highly advanced in pharmacy as Russia there exist cutting chemists. The announcement is made that S. Goldberg has taken over the apteka of the late R. Kellar, and sends out foreign patent medicines, disinfectants, &c., at drug-store prices. Whether Mr. Goldberg has his window ornamented by Broddingnagian frogs harnessed to triumphal cars bearing throat-lozenges of great size, or mannikins made to roll their eyes and point to notices of headache-powders associated with a flower opening its petals in the early morning, I know not. It is certain, however, that even in Russia stores exist. In the Russian Empire there are 6,932 pharmacists, of whom 3,131 are provisors, 2,527 are apteka-assistants, 1,215 are apprentices, and only 59 are magisters. The conditions of life in an apteka are harder and more abnormal than in this country. Every worker is engaged ninety to ninety-six hours per week, and if we add to this eight hours' sleep per diem, we find that the Russian pharmacist has for recreation and self-improvement sixteen hours per week. A signed letter from a first-class Moscow paper from which the above is quoted, and which is not likely to magnify the case, declares that for 200 years nothing has been done to improve the condition of the aptekar. With his eight or ten years' study he does not appear to be better off than his confrère in England, except as regards social status.

On the motion of the PRESIDENT, seconded by Mr. T. F. ABRAHAM, a vote of thanks was accorded to Mr. Marsden. In commenting on the paper Councillor A. H. SAMUEL gave a brief account of his trip to Moscow as a delegate to the Medical Congress.

COMPLIMENT TO A MEMBER.

The PRESIDENT then announced, amid applause, that Mr. Edward Davies had, at the last meeting, been elected an honorary member of the Association. For thirty years he had been an active and helpful member of the Society, having, during his connection with it, served in every official capacity with benefit to the Society and credit to himself. Mr. DAVIES briefly acknowledged the honour in a speech which appealed strongly to younger members to fill up the breaches made by change and time.

LIVERPOOL PHARMACEUTICAL STUDENTS' SOCIETY.

At a meeting of the Liverpool Pharmaceutical Students' Society on February 10 Mr. HAROLD WYATT, junr., Ph.C., read his paper entitled

DISPENSING NOTES,

which he said was a record of certain difficulties met with of late in the ordinary course of a dispensing business.

Argenti nitratis	...	...	gr. vj.
Pulv. digitalis fol.	...	...	gr. iij.
Ext. nucis vomice	...	...	gr. vj.
Pulv. capsici	...	...	gr. xij.

In pil. xij. divide.

To minimise the action of the other ingredients on the nitrate of silver it was triturated with 10 gr. of French chalk and massed with resin ointment. The powders and extract were then separately massed with more resin ointment, and the two masses mixed and cut into pills, which kept their colour and shape well.

Syrupi sennæ	...	...	5j.
Sodii sulphatis	...	...	5j.
Aluminis sulph.	...	...	gr. xl.
Tr. carminativæ, B.P.C.	...	...	5iss.
Ext. glycyrrhizæ liq.	...	...	5j.
Aquam ad	...	...	5viij.

M. Fiat mistura.

The solids in this being more than enough to saturate the liquids, they were rubbed to a fine powder, the syrup of senna and extract of liquorice worked in, and water added gradually, and the tincture last of all. In addition to the undissolved sulphate of soda there is a precipitate caused by the action of the alum on the glycyrrhizin of the fluid extract of liquorice. A few drops of ammonia would dissolve this, but the use of it is not to be recommended, as it would convert the alum into hydrate, and cause a further precipitate.

Potassii iodidi	...	...	gr. clx.
Syrupi ferri iodidi	...	...	5j.
Inf. calumbæ ad	...	...	5viij.

M. Ft. mist.

This mixture changed almost immediately, giving a red precipitate of oxyiodides of iron. The patient having to continue the use of this mixture for some time, it was imperative that some preservative should be used to retard the reaction, if possible, and so, with the doctor's permission, hypophosphorous acid, B.P.C. was used, in the proportion of 40 minims to the bottleful. This had the desired result.

Pot. bromidi	...	...	5ij.
Bismuthi salicylatis	...	...	5iss.
Pulveris acaciæ	...	...	5iv.
Spt. chlorof.	...	...	5ij.
Aquam cinnamomi ad	...	...	5viij.

M. Ft. mist.

Make the gum into a mucilage with half the cinnamon-water, and pour into the bottle; then rub the salicylate of bismuth down to a very fine powder, to which add the spirit of chloroform, making a smooth cream, which is thinned further with $\frac{1}{2}$ oz. of cinnamon-water, and poured into the mucilage in the bottle, well shaking. The bromide is separately dissolved and added to the other ingredients, the froth from shaking being removed with a drop or two of spirit of chloroform. The salicylate has a tendency to float unless well rubbed down with the spirit of chloroform before mixing with the mucilage.

Hydronaphthol.	...	...	gr. xij.
Pulveris iridis	...	...	5j.
Zinci oxidi	...	...	5j.
Cimolite	...	...	5ij.
Pulveris amyli ad	...	...	5j.

M. Fiat pulvis aspersorius.

To obviate any chance of small particles of the hydronaphthol irritating the sore surface to which the powder was to be applied a solution of the salt was made in ether 5ij. and poured on to the other ingredients, previously mixed together and contained in a warm mortar. With brisk trituration the ether was soon dissipated, and a smooth even powder resulted.

Plumbi acetatis	...	...	gr. xxx.
Cocainæ	...	...	gr. x.
Aquæ rosæ ad	...	...	5x.

M. Ft. collyrium.

As the uncombined alkaloid would precipitate part of the lead salt, it was converted into the acetate by the addition of the least possible quantity of acetic acid and mixed with the lead acetate dissolved in the rose-water.

Quininae sulphatis	...	...	gr. xxiv.
Magnesiæ sulphatis	...	...	5ss.
Tr. ferri perchlor.	...	...	5j.
Aquæ chlorof. ad	...	...	5vj.

M. Ft. mist.

The quinine dissolved at first in the tincture, but dilution caused a precipitate of oxychloride of iron. Enough dilute hydrochloric acid was used to dissolve this precipitate, or rather to prevent its formation—viz., $\frac{1}{2}$ xxiv.

Styracis pptæ.	...	...	gr. cxlv.
Adipis ad	...	...	5j.

M. Ft. unguentum.

Melting the storax with 2 dr. of castor oil and rubbing in a hot mortar with enough lard to make 1 oz., was found to give a better ointment than that made with lard alone.

Cocainæ	...	...	gr. iv.
Camphoræ	...	...	gr. xxiv.
Acid. carbol.	...	...	gr. xlvij.
Menthol.	...	...	gr. xlvij.
Olei petrolei rect. ad	...	...	5j.

M. Ft. applicatio.

It was certain that the doctor did not intend rectified oil of petroleum to be used, so white liquid paraffin was employed, which turned out to be correct.

Sodii hyposulphitis	...	...	5vj.
Acidi sulphurosi	...	...	5ss.
Glycerini	...	...	5ij.
Aq. ad	...	...	5viij.

M. Fiat lotio.

The sulphurous acid caused a precipitate of sulphur and evolution of sulphuretted hydrogen from the thiosulphate.

Argenti nitratis	...	...	gr. $\frac{1}{4}$
Strychminæ	...	...	gr. $\frac{1}{16}$

Fiat pilula. Mitte xlviii.

The doctor, wishing the patient to take these pills for a lengthy period, asked if the blackening he had seen in similar pills could be stopped or hidden, as the patient, on seeing the change, was under the impression the coloured pills did not have the same effect as the fresh ones. A little charcoal was added to hide the change in colour.

Cachets, containing Stockholm tar, 2 gr. in each, were prescribed for a patient who could not swallow pills. Remembering a remark of a former apprentice, that the infusorial earth called dimatos should be good as an excipient for pills containing carbolic acid or creosote, the Stockholm tar was rubbed with enough dimatos to make it into a dry powder, every 2 gr. of tar requiring 3 gr. of dimatos. This was then weighed out into 5-gr. powders, which were enclosed in No. 1 cachets. The powder retained the tar and caused no colouration of the cachets even after keeping over a month.

Dimatos had been found useful in a pill of creosote, 1 minim, and valerianate of zinc, 3 gr. There appears to be some reaction between creosote (Morson's) and valerianate of zinc, for I have noticed that though at first becoming liquid they rapidly become harder, whatever be the excipient used.

At the conclusion of the paper a discussion took place in which Messrs. MARSDEN, WARDLEWORTH, MITCHELL, HARRIS-BURNS, WOKES, and the PRESIDENT (Mr. H. Pierson) took part. A vote of thanks was accorded to Mr. Wyatt for his contribution.

The question of dispensing prussic acid in 1-oz. bottles for administration in 5-minim doses was raised by Mr. P. H. MARSDEN, who said the dangerous practice in question had come under his notice. The opinion of the meeting was that the practice was not by any means general, and the PRESIDENT suggested that it would be safer to send it out in a number of small dose bottles rather than in bulk, when it unfortunately had to be prescribed alone. Mr. H. WYATT said he

thought the use of the acid could be overcome by having a standard solution of potass. cyanid. put in its place, and he hoped that this change would be made in a future B.P.

THE PHARMACY STAKES—A STRAIGHT TIP.

A PAPER with the above title was read on February 9 to the members of the Brighton Junior Association of Pharmacy by Mr. A. T. JEEVES, ex-President of the Association.

He said that in the year of the record reign two rather notable events were chronicled in the history of our craft—(1) the forward policy adopted by the Pharmaceutical Society, and (2) the P.A.T.A.—and he proposed to examine the value of the claims put forward by each of these organisations to ameliorate the condition of the trade. The Pharmaceutical Society makes the raising the status of the trade a leading question, and, with that view, it sketches out schemes of a higher standard of education, stiffer examinations, and, last, but by no means least, increased fees. To those who have got beyond the clutches of the Bloomsbury gang it may seem politic to intimidate the would-be pharmacist with the spectres of stiff examinations and stiffer fees, but from an unbiased and more liberal standpoint we find ourselves confronted with these two questions: (1) Is the chemist and druggist of to-day sufficiently educated to carry out the varied duties of his business? or (2) Will a higher standard of education produce in the successful candidate a better chemist or a more successful man of business? Our business is a many-sided one, and though there is a wide gulf between the frock-coat and black-tie dispensing-business in the West-end of London and the mixed paint, paraffin, and shirt-sleeves business in the Black Country, the fact remains that the proprietors of both are registered chemists, members of the same calling, and have both entered it by the same door of the Minor examination, and have had to acquire the same amount of knowledge, more or less superficial. But the system of stiffer examinations is repudiated by the future or would-be frock-coats and shirt-sleeves. Mr. Frock-coat wants no extra botany, chemistry, or materia medica. They are of no use to him. Rather teach him the principles of photography, electricity, or optics, so that he may turn the knowledge into hard cash. Our future Shirt-sleeves is not a whit more cordial in his appreciation of the Society's scheme. He wants to be taught veterinary medicine and practical pharmacy, so that he may be more likely to gain a front place in the struggle for existence. The knowledge essential to the chemist and druggist is acquired at the dispensing-counter, under the tuition of an experienced tradesman, and not at pharmacy schools.

PHARMACY SCHOOLS

are the means of providing a man who has little time and less cash with a host of disconnected scientific phrases, by which he gains the *entrée* into a calling in which such knowledge is unmarketable. Why is a qualified man able to command a better position and a higher salary than an unqualified one? Is it because of his scientific knowledge or higher educational attainments? Not a whit. It is because, by virtue of his qualification, he is legally entitled to retail poisons and to take entire charge during his employer's absence. An examination for qualification is, of course, a necessity, but a stiffer examination is not only quite uncalled for, but is unjust. The educational schemes of the Pharmaceutical Society cannot in any way help forward that consummation of our desires. Taking for granted that the present-day chemist and druggist is sufficiently, if not more than sufficiently, educated for his position and duties, is he likely, in a more or less distant future, to occupy a position where a higher standard of both elementary and technical education will be the first essential? Judging from past and present indications, the tendency is to the contrary. A generation ago, doctors, without exception, used Latin in writing directions to prescriptions, making a fair knowledge of that language essential to the dispensing chemist, which is far from being the case now. Elegant pharmacy is now the order of the day, and pills, capsules, plasters, tablets, &c., are turned out quicker, cheaper, and better, by large wholesale firms with their up-to-date machinery, than by the small dispensing chemist with his tin-pot modes of operation. Again, our fellow-craftsmen are re-

lying more and more upon commercial enterprise for bringing in the needful, and paying more heed to the front counter than to dispensing. Note also the evolution of window-dressing. A couple of specie-jars used to be the sole adornment, but we now find small flower-gardens, battalions of frogs, and a miscellaneous assortment, whose connection with pharmacy it is hard to discover. Times have changed, and the wise man takes time by the forelock, and quickly acclimatises himself to the new state of things. In any case do not lay your money on that fossilised thoroughbred the Pharmaceutical Society, who, with or without its latest developments, is no winner in the Pharmacy Stakes, possessing neither strength nor endurance, and is heavily handicapped by the lack of confidence and support of the trade.

With reference to the P.A.T.A., Mr. Jeeves said that he did not believe that any real or lasting benefit could come from supporting it, for it appeared to him only just and right that the public should get everything at the lowest possible price, and if the chemist did not care to sell an article at cost price, he saw no justice in the policy of trying to stop the drug-store opposite from doing so. Apart from the principle involved, the *modus operandi* adopted by the P.A.T.A. was useless. All goods on the P.A.T.A. list are sold under condition of not being retailed below a certain figure—firms selling these goods below the fixed price are liable, on detection, to have their supplies cut off—and to carry out effectually that part of the scheme nothing short of a small army of detectives would be of use. One does not care to play

THE SPY ON HIS BROTHER CRAFTSMAN,

and the *role* of informer is equally distasteful; so the only course open is to adapt oneself to one's neighbouring cutter's prices. He then referred to the limitation and protection of prices of proprietary articles, pointing to the interest of proprietors in the P.A.T.A. proceedings, although he did not consider that the P.A.T.A. had done much, if any, good. He then went on to say that though there were no fortunes to be made in the drug-trade, still the opportunity was open to all of backing the winner of the Pharmacy Stakes in the shape of a substantial annual income; and as a keen sportsman and patron of the pharmacy Turf he gave them as a straight tip for winner Brains, ridden by Push and spurred by Perseverance. He laid down as an axiom the fact that pharmaceutical qualifications often run in inverse proportion to the length of our banking-account, and urged self-reliance and originality as the means of conquering the baleful influences of underhand competition and company-pharmacy. There is no calling which gives more scope for thoughtful enterprise than our own, and instead of whining at the badness of the times let us take as encouragement the example of such firms as Benger, Beetham, Squire, or Savory, who, starting in a small way, had amassed large fortunes from the sale of proprietaries. Besides proprietaries, he mentioned such profitable extras as photography, radiography, dentistry, bacteriology, chemical and microscopical analysis, and optics. In conclusion, the author said perhaps he might be accused of putting too much stress on the money-making side of pharmacy, but though money was a great factor in the sum of human happiness, still, when procured at the expense of honour and brotherly kindness, the exchange was poor indeed. We cannot but admire the motive which actuates the men who stick to the old methods, but we cannot afford to imitate them.

CHEMISTS' ASSISTANTS' ASSOCIATION.

A MEETING of this Association was held on February 10, Mr. Morley Taylor (President) in the chair. Mr. J. CAMPBELL FELL, F.C.S., read a note on

THE SOLUBILITY OF GLASS IN WATER.

Mr. Fell said he had undertaken the work with the object of ascertaining whether a quantity of glass could, in a short time, be dissolved sufficient to affect the amount of total solids in an ordinary potable water brought for analysis. Six samples of water were examined, two of which were specially collected for these experiments. In five cases pale green Winchester quarts were used, and in the sixth a dark blue Winchester; 70 c.c. was evaporated in the water-bath, dried, and weighed, and in most cases duplicate determinations were made. It

was found that in only one case—that of the dark blue bottle—was there any material increase in the amount of total solid residue, and therefore he recommended the use of pale green bottles for the collection of samples for analysis. A discussion followed, after which the PRESIDENT called upon Mr. Herbert Hymans to read a paper on

THE ESTIMATION OF PHENOL.

Mr. HYMANS said that in estimating phenol by Koppeschaar's process a possible source of error lies in the loss of bromine-vapour, and he had devised a process to obviate this difficulty, and to give results which compared favourably in accuracy and rapidity. Instead of using bromine he employs hydrobromic acid and potassium permanganate, which react with liberation of bromine, and as this is done in presence of the phenol, tribromophenol is at once formed.

The estimation is conducted as follows:—Five grammes of the crystallised phenol is dissolved in water and made up to 100 c.c.; 5 c.c. of this solution, with about 10 c.c. of hydrobromic acid (30 per cent. HBr), is placed in a flask fitted with a good cork or rubber stopper. The semi-normal potassium permanganate is then delivered from a burette in quantities of about 5 c.c. at a time, the flask being thoroughly well shaken after each addition. When about 29 c.c. has been run in a few drops of chloroform are added to cause the bulky precipitate of tribromophenol to agglutinate and fall to the bottom of the flask, as otherwise it adheres to the glass rod. Care must be taken to add just sufficient chloroform to cause the precipitate to settle (not to dissolve it), as if more than two or three drops be added some of the liberated bromine is dissolved, thus giving too high results.

After thoroughly shaking, a small quantity of the clear supernatant liquid is removed with a glass rod and tested on a white tile with a drop of carmine solution. The carmine solution is made by boiling 1 gramme of carmine with 80 c.c. water and 20 c.c. alcohol and filtering. The standard permanganate solution is then carefully added until the pink colour of the carmine is completely discharged when tested as above.

The semi-normal permanganate is made by dissolving 15.8 grammes pure KMnO_4 in water and making up to 1,000 c.c.; 1 c.c. of this solution = 0.00781 gramme phenol, therefore the 5 c.c. titrated would require 32 c.c. if the phenol were quite absolute. In the case of estimating the amount of phenol present in a solution of unknown strength, it must be diluted until 5 c.c. requires a convenient quantity of standard permanganate. If the solution is already too weak for semi-normal permanganate, it can be titrated with decinormal. This method is also applicable in the estimation of thymol, cresol, naphthol, salicylic acid, &c., as with Koppeschaar's process.

The author thanked Messrs. Wright, Layman & Umney, in whose laboratory he had experimented.

Mr. GAMBLE (Secretary) next directed the attention of the meeting to the subject of the

RECOPYING OF PRESCRIPTIONS FOR POISONS.

The matter arose from the conviction of a chemist for selling morphine and atropine tablets without entering each sale in the poison-book. Thereupon the *Pharmaceutical Journal* stated that it is necessary to copy a prescription containing poison on each occasion it is dispensed. Mr. Gamble pointed out that it is customary to copy the prescription in the first instance only, and to enter repeats in the prescription-book.

Mr. E. W. HILL drew attention to an American machine for making suppositories by compression, and demonstrated the ease with which it is worked and the perfection of its results.

EXETER ASSOCIATION OF CHEMISTS AND DRUGGISTS.

ON Saturday evening, February 12, the Mayor of Exeter distributed the prizes and advanced certificates, at the Technical College, to the successful students, including the following, given by members of the Exeter Association of Chemists and Druggists, in connection with the classes held by Mr. Alan Ware, Ph.Ch.:—

Prize offered by Alderman H. Gadd, J.P., of Messrs. Evans,

Gadd & Co., wholesale druggists, to the student who should do best in advanced chemistry.—Mr. G. Rae.

Prize offered by Mr. J. Hinton Lake, pharmaceutical chemist, to the student who should do best in pharmacy and materia medica.—Mr. Jordan.

Prize offered by Mr. G. Stocker to the student who should collect the best herbarium of British plants within ten miles of Exeter.—Mr. Berini Palmer.

Prize offered by Mr. G. F. Rowsell, of Messrs. Holman, Ham & Co., to the student who should do best in elementary chemistry.—Mr. Berg.

Special prize given by Mr. J. Hinton Lake for elementary chemistry.—Mr. H. Pellow.

EDINBURGH CHEMISTS', ASSISTANTS', AND APPRENTICES' ASSOCIATION.

AT the meeting on February 11, Mr. George Sinclair (President) in the chair, the following papers were read:—

LIQUID EXTRACT OF TARAXACUM.

By A. J. Dey.

Two samples which came into the author's hands differed so much that he was led to investigate the subject. A standard extract was made by the method of direct percolation recommended by Squire, and yielded a thicker and darker liquid than was shown by any of the seven commercial samples compared with it. Copper was found in all the seven samples. The sp. gr., alcoholic content, and extractive exhibited a great lack of uniformity.

NOTE ON ALCOHOLIC EXTRACT OF BELLADONNA.

By A. J. Dey.

A sample which had been standing a few years appeared quite granular, and on examination was found to be full of crystals. A few of these had been separated and examined, and proved to be cane-sugar. Previous reference to the subject had shown the presence of dextrose, but here it appeared to be cane-sugar, as Fehling's solution was not reduced until after boiling with dilute sulphuric acid.

NOTE ON PHENACETIN.

By A. J. Dey.

The author exhibited a sample of phenacetin which, when powdered in a mortar, emitted a strong odour of benzene. The explanation seemed to be that it had been crystallised from solution in benzene.

THE HISTORY AND CULTIVATION OF THE SAFFRON-PLANT.

By Fred. B. Hirst.

The author gave an interesting *resumé* of the subject, and touched upon the uses and adulterations of saffron.

The reading of the papers was followed by a discussion, in which it was stated that the official process for liquid extract of dandelion involved a great waste of spirit. It was mentioned that saffron was bought by Jews to colour soups, and by hotel people for colouring jellies and as an egg-substitute. It was used to dye window-curtains, and was administered to canaries during moulting. In some parts of the country it was used extensively as a domestic remedy for measles. On the motion of the CHAIRMAN, votes of thanks were awarded to the authors, and the meeting closed.

ABERDEEN JUNIOR CHEMISTS' ASSOCIATION.

AT the meeting held on February 11, a lecture was delivered by Mr. R. Leslie, Ph.C., on "Glycerine," descriptive of its manufacture and uses.

NEWCASTLE-ON-TYNE AND DISTRICT CHEMISTS ASSOCIATION.

A MEETING of this Association was held in the Church Institute, Newcastle-on-Tyne, on February 9, Mr. George Weddell in the chair.

Mr. ROBERT DAVIDSON gave a lantern-lecture on "A Tour in Scotland." Mr. Lionel Williamson manipulated the

lantern. Many of the views were familiar to those who attended the Conference in Glasgow last August, and were a good selection.

Votes of thanks to the lecturer and lanternist concluded a successful meeting.

THE MANCHESTER PHARMACEUTICAL SOCIETY.

AT the meeting of this Society, on February 9, Mr. KIRKBY gave a brief address with respect to the use of metric weights and measures in pharmacies, especially in view of the introduction of these into the new Pharmacopœia. Mr. Kirkby dealt with the difficulties of the metric system, and showed the necessity of becoming familiar with it.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

NORTH BRITISH BRANCH.

A MEETING was held in Edinburgh on Wednesday evening, February 16. Mr. J. Laidlaw Ewing presided. The attendance was not large. Mr. ARTHUR MCKELLAR (Glasgow) read a paper on the

ESTIMATION OF SUGAR IN URINE BY THE KINNINMONT PROCESS.

Mr. McKellar recapitulated the processes most in favour, drawing for that purpose on Dr. Roberts's work "On Urinary and Renal Diseases," and then brought under notice a test originally devised by Mr. Alex. Kinninmont. It was a combination of Frommer's and Pavy's tests. He had used it for a considerable period of time and found it answer admirably. The formula was—

Pure sulphate of copper	...	...	90½ gr.
Distilled water	...	...	2 oz. 225 gr.
Glycerin	...	...	4 oz. (by weight)

Each ½ oz. would decompose ⅓ gr. sugar.

Pure grape sugar was obtained, rendered perfectly anhydrous, and used as a standardising-agent in the preparation of this "copper sugar-test." It kept perfectly, and would be found very handy for shop use. His method in testing urine, both qualitative and quantitative, was as follows:—Having noted the sp. gr., as well as the presence or absence of albumen, he boiled equal amounts of the test and liq. potassæ together, and, whilst boiling, ran in a little of the suspected urine, when, if sugar was present, it would be indicated in the manner described under Frommer's test. If present in any quantity the amount of darkening produced was observed as a rough indication of the probable quantity of sugar to expect in the quantitative determination. So far the usual course had been followed. He now took ½ oz. of the copper solution and carefully rinsed it with a little water into a 4-oz. flask, then added an equal bulk of liquor potassæ, and finally a large excess of liquid ammonia; the whole was then boiled. A small quantity of the urine was appropriately diluted with a definite proportion of water according to its supposed strength—say, 1 part urine to 2 parts of water—and by the aid of a thin glass stirring-rod a few drops at a time were run into the boiling liquid. When reaction was complete the blue colour had entirely disappeared and the liquid had become clear. The actual amount of urine used in this operation would have contained ⅓ gr. of grape-sugar, and the result calculated to grains per oz. as it was usually given. The whole operation need not take more than a couple of minutes. The vapour of the boiling ammoniacal liquor served to keep off atmospheric influence on the copper oxide, but on the removal of the source of heat, oxygen was absorbed from the air and the blue colour gradually returned as the liquid cooled. He could not claim any originality for this method, but from long experience of its use was fully convinced of its efficacy.

A discussion followed in which Mr. PETER BOA said they got very little of that sort of work to do in Edinburgh, as the Edinburgh School of Medicine taught their graduates to do it for themselves. Mr. GEORGE LUNAN said his experience of this kind of work was greater in Liverpool than Edinburgh, but they should be able to do the work when called upon. His attention was directed to Gerard's method for determining

glucose in urine, and recently he had used that process and found it very satisfactory. Mr. DUNCAN said some years ago he examined his own urine, but he found that it was a mistake for anyone to do so, as he might get on the wrong side of a lunatic asylum. Some time ago a sample of urine was brought to him by a patient who had been rejected for life-insurance on the report of a Glasgow doctor that his urine was loaded with glucose, when, as a matter of fact, there was no glucose in it. The doctor had used an old solution of Fehling's. He thought it would be an improvement to drop the urine from a burette instead of a glass rod. Mr. MCDIARMID said in London he had considerable experience in testing urine; his object was to find a test which would act quickly and sharply, and he finally came to the conclusion that Dr. Johnson's test was practically as successful as any. Fehling's test was tedious, and required an expert to see when the action was finished. He wished to know from Mr. McKellar what advantage his process had over Pavy's in which the ammonia was got rid of by passing it into a solution.

Mr. J. RUTHERFORD HILL said it was most desirable that pharmacists should make themselves familiar with such estimations. As education increased in the community it would more and more become a function of the pharmacist to do certain things for the public that were at present done by medical men. People would pay more attention to the conditions of health and the symptoms and treatment of disease, and they would naturally turn to the pharmacist as the man to do the work for them. He knew several instances in which that was being done to a considerable extent. Mr. McKellar's test seemed pretty much the same as that recommended by Purdy in his book on urinalysis. He would like to know if Mr. McKellar had tested his process against others to see in what they corresponded or differed. He thought with Mr. Lunan that Gerard's process must supersede all others; the results by Mr. McKellar's process might answer sufficiently for ordinary purposes of diagnosis, but would be only roughly approximate.

Mr. MCKELLAR, in reply, said his object in reading the paper was to give a method which could be used readily in a druggist's shop. With the apparatus always at hand, he admitted that the use of a burette would be an improvement. The advantage of his solution over Pavy's was that it was more readily made. He had tried his process against others, using anhydrous grape-sugar, and found it to be accurate. On the Continent this kind of work seemed to be generally done by druggists.

The next paper read was on

FLUID EXTRACT OF LIQUORICE,

By Mr. Peter Boa,

who said that some months ago he was accidentally led to consider the subject by hearing a pharmacist impugn the efficiency of the pharmacopœial process. Having a strong conviction that the Pharmacopœia is not in its practical aspect second to any other, he took the liberty of questioning the statement. A look at the official process shows that the method is different from the process adopted for any other fluid extract in the Pharmacopœia. Two points deserve notice as being characteristic: one is that it has to be evaporated so that when cold it shall have a sp. gr. of 1.160, the other is that only one-sixth of its volume of spirit has to be added—presumably to preserve it. Many years ago Mr. C. Umney stated that the process was in principle a sound one, with which he agreed. Percolation naturally suggests itself as a remedy for the trouble of double maceration and expression. If the weather be warm, however, percolation cannot be accomplished quickly enough before fermentation begins, which gives rise to a loss of the sweet principle. Evaporation to a given sp. gr. is designed to permit of the manufacturer using any sort of root, some roots being so poor that evaporation to a given volume would yield a very poor extract. The quantity of spirit ordered had always been with him sufficient for preservative purposes, but he had frequently been told that it is not enough. The United States orders a menstruum consisting of dilute alcohol with 3 per cent. of water of ammonia. Having prepared some fluid extract according to this process he found it compare very unfavourably in taste with our fluid-extract. The use of ammonia is based on the

circumstance that the sweet principle is a salt (glycyrrhizate) of ammonia, and exists in the root as such. Professor Remington (Proc. Amer. Pharm. Assoc., vol. 25) gave in 1873 the result of a series of experiments with different menstrua carried out "to ascertain the best menstruum and to discover the bearing that an addition of solution of ammonia to the menstruum would have upon the finished product." The results led him to conclude that the addition of ammonia very perceptibly diminished acidity (of a fluid extract made by an alcoholic menstruum) and increased the quantity of glycyrrhizin (in one sample nearly 50 per cent.). Since then ammonia has commanded great respect in connection with liquorice.

In order to ascertain how the addition of ammonia to the menstruum used in our pharmacopœial process influenced the resulting extract, he had prepared several batches in the making of which ammonia was used, and found that 10 to 12 per cent. more extractive was afforded by the ammoniacal percolate than by the watery percolate. However, after conversion into fluid extract had been completed and time allowed for "settling," the precipitate resulting from the addition of the spirit occupied almost double the space taken up by the corresponding deposit from the aqueous extract. Compared as to specific gravity, the two extracts were practically identical.

In order to compare the two products as to appearance, flavour, and volume of sweetness 1 fl. dr. of each was diluted with water to an ounce. The dilution from the ammonia extract had a much darker and richer colour than that from the aqueous extract. In volume of sweetness, however, it was distinctly inferior, and its flavour thin, and wanting in character. The use of ammonia, therefore, appeared to him to be not only unnecessary, but objectionable. It may be used, however, with advantage in another way. Having observed that ammoniacal percolates did not exhibit the same tendency to throw down a deposit of glycyrrhizin as was shown by the watery ones, it occurred to him to add ammonia to the aqueous percolate just in sufficient quantity to maintain alkalinity while percolation was proceeding. Later, he carried the use of ammonia still further, by adding it just in sufficient quantity to carry the liquid extract over the border line of neutrality into alkalinity. The best extracts which he had prepared had been made in this way. So long as alkalinity is maintained there was no depositing. He had observed in his experiments that an increase in the quantity of spirit used for the extract seemed advantageous.

His conclusions were that cold water is the best menstruum for extracting the sweetness of liquorice. If percolation of a rougher powder were substituted for the double maceration and expression of the root in No. 20 powder, as directed in the official formula, it would make the process less messy. Ammonia might be judiciously employed in the way he had indicated to prevent loss of sweetness; and a slight increase in the spirit would make sure work of preservation and produce a cleaner extract.

In the discussion which followed, Mr. LUNAN said he was very much surprised to know that Mr. Boa had found cold water the best means of extracting liquorice.

Mr. DUNCAN thought it was a mistake to use undecorticated root.

Mr. J. R. HILL said he thought Mr. Boa had gone a long way to prove that Remington was under a misapprehension in recommending ammonia.

Mr. BOA said he thought extract from decorticated root was not an extract of liquorice-root, and was not much better than syrup; and as liquorice extract was used for masking the taste of medicines, they wanted to get the extract of the entire root.

Votes of thanks were then given to the authors of the papers, and the meeting terminated.

GRATEFUL BUT NOT COMFORTING is a phrase which might be applied to a young man who has been swindling wholesale druggists and others in New York and Boston, by pretending to be a son of Epps, the cocoa-manufacturer. He talks fluently about the drug business, of which he appears to have a thorough knowledge, relieves the conversation with charming references to art and travel, and mentions that his banker has failed to send his remittance, and he will be grateful, &c.

Cambridge Pharmaceutical Society.

THE annual dinner of this Society, held on February 10, was somewhat exceptional in character. Mr. Walter Hills, President of the Pharmaceutical Society, Mr. Glyn-Jones, of the P.A.T.A., and three editors of London drug-trade journals were present as guests, together with Drs. Anningson (Medical Officer of Health), T. Hyde Hills (brother of the President of the P.S.G.B.), W. Penberthy, and Apthorpe Webb. Mr. Alderman Deck presided, and the company numbered in all thirty-five.

One of the principal toasts was that of "The Pharmaceutical Society," which was proposed by Mr. A. S. Campkin, who said that they felt a special interest in its President, because of his relationship to their distinguished friend, their late Mayor, Dr. T. Hyde Hills. Mr. Campkin alluded to the discussion on the by-laws, and to the legislation in embryo. He felt that the time had arrived for establishing the status of those qualified men who had not hitherto possessed the full privileges of the Society. He had no doubt, too, that the Council were watching the probable legislation to amend the Food and Drugs Act and the Companies Acts.

Mr. Hills, in the course of his reply, expressed his hope that the time might come when pharmaceutical courses would be affiliated with university education, and probably university degrees might follow. He hoped that a conference on the subject of education might be brought about within a year or two. The Pharmaceutical Society, he maintained, with all its faults—and some people were never tired of speaking of its faults—did good work, not only for its members, but for all on the register. He mentioned that they dealt with some 300 cases of infringement each year, and the amendment of the Companies Act, and the claim of the Society to be represented on the Board of Reference under a new Adulteration Act, were engaging their attention. Alluding to the former he said they could not get away from the judgment in the House of Lords, but after all that judgment had been good for them in one respect—it was a judgment in favour of qualified persons. He thought if two-thirds, or, still better, three-thirds, of the trade would join them, they could do much more for their common calling. Mr. Hills then commented at some length on the Pharmacy Bill, urging that in giving membership to chemists and druggists they were not taking anything away from pharmaceutical chemists; M.P.S. was not a qualification. He also protested against a recent criticism he had read in THE CHEMIST AND DRUGGIST, stating that the Bill seemed to be an appeal for guineas and not much else. They had no objection to guineas. If they had 3,000*l.*, 4,000*l.* or 5,000*l.* a year more they could, doubtless, spend it to the advantage of the trade; but this was not what they were seeking. They wanted men, they wanted union, they wanted consolidation. He urged them to help the Bill all they could.

Mr. E. Saville Peck, B.A., in proposing "The Medical Profession," took the opportunity to comment on the practice of dispensing by doctors, and also expressed the wish that the Medical Council could bring the Pharmacopœia up to date, so as to prevent so much prescribing of such preparations as Fellows's syrup, cascara tabloids, and Californian fig-syrup. Drs. T. Hyde Hills, W. Penberthy, and Apthorpe Webb replied, and some amusement was occasioned by their apologies for medical dispensing, which they were all anxious to abandon, and their *tu quoque* arguments in reference to prescribing by chemists.

Mr. C. S. Addison proposed "The Cambridge Pharmaceutical Association," and dwelt on the advantage of such associations threshing out questions of trade interest. The Chairman, in response, said their Association, though a small one, had done much good in bringing them together, and had also, he believed, done something in checking cutting. If cutting were confined to beef or mutton, so as to give some to people who did not otherwise get it, it would do good. But he did not see what possible object there could be in cutting the price of pills. Mr. B. S. Campkin, Hon. Secretary, also replied briefly.

"Kindred Organisations" was a toast proposed by Mr. H. F. Cook to extract a speech from Mr. Glyn-Jones, who said

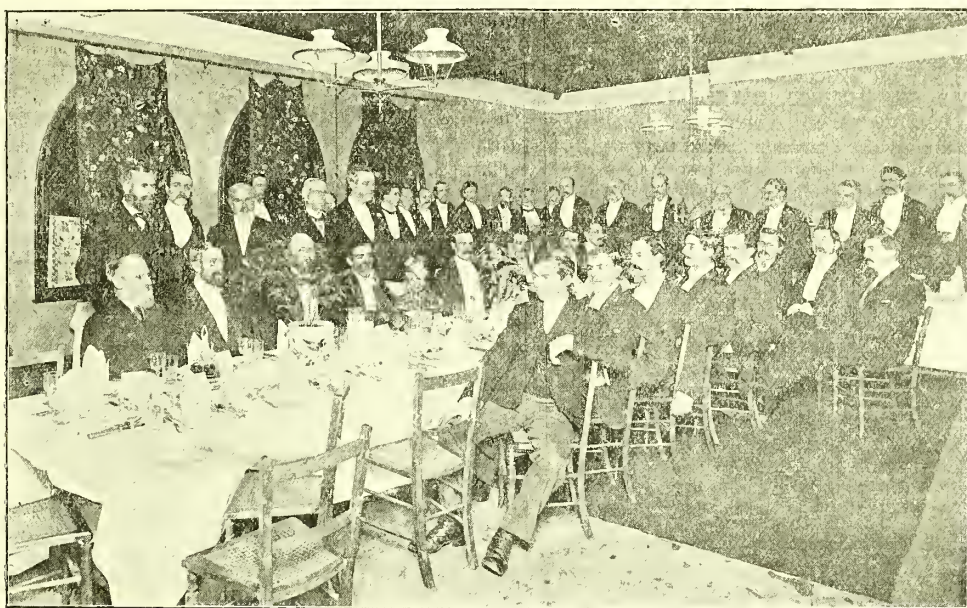
he would treat the subject from the standpoint, not of a profession, but from that of a trade. Chemists must recognise that their business was governed by the laws which affected all other trades, and it was for them to adopt all such honourable means for their protection as were open to them. He considered that one reason why the Pharmaceutical Society was not supported as it might be was because its leaders did not recognise that many chemists could not give the time and thought that they expected to matters of education. He heard from many that it was almost ridiculous to prepare men so elaborately for duties which they would probably never have to perform. They were trained to dispense, and three-fourths of the dispensing was done by others. Referring to the discussion they had just heard on this subject, he said it was like the Greeks and the Turks. One side said, "You get out of Thessaly," the other said, "You get out of Crete." But neither would make the first move. The medical men had a remedy against chemists who unfairly prescribed, and he believed the Pharmaceutical

The New Pharmacy Bill.

MIDLAND PHARMACEUTICAL ASSOCIATION.

THE Council of the Midland Pharmaceutical Association held a special meeting at Mason College, Birmingham, on February 9, to consider the new Pharmacy Act Amendment Bill. The proceedings were conducted in private. The President (Mr. F. J. Gibson) was in the chair, and there were also in attendance Messrs. J. Poole (Vice-President), A. Southall, F. H. Alcock, C. Thompson, F. H. Prosser, W. C. Scott, and H. S. Shorthouse (Hon. Secretary). Messrs. T. W. Chapman, W. R. Selleck, and G. E. Perry, wrote expressing themselves in favour of the Bill.

The PRESIDENT, in the course of a short speech, said the Bill was a good one so far as it went, but it did not go far enough.



Photograph by Mason, Cambridge.

Society had a remedy also against medical men who dispensed poisons, as many of them did, by the hands of unqualified assistants. He had lately read, with much interest and sympathy, the address at Manchester, by Mr. Taylor, of Bolton, urging that the Pharmaceutical Society should become more of a trade-union, and he agreed with that. If it was said that being entrusted with the duty of administering the Act prevented the Society so acting, he submitted that they were purchasing their dignity too dearly. He wanted to see the Society assisting to maintain a branch society, with a paid secretary, in every town where there were a dozen chemists, and he gave some indication of what such a society could do. He mentioned that in Cambridge the P.A.T.A. had fourteen members among the seventeen chemists, and he ventured to say that fully three-fourths of the trade in proprietary medicines, in this and other towns, passed through the hands of their members. This would show what a leverage they were growing.

Some diversion was occasioned towards the end of the evening when Dr. Paul, replying for the pharmaceutical press, took advantage of the opportunity to assail THE CHEMIST AND DRUGGIST in somewhat bitter terms. The "unreasonable opposition" of THE CHEMIST AND DRUGGIST to the by-laws last year was specially instanced, and Dr. Paul said he "felt it his duty to warn his erring friend that he was going the way to win for his journal the reputation of what Prince Bismarck once described as the reptile press." Mr. A. C. Wootton and Mr. J. F. Cantwell also replied to the toast.

This view was also emphasised by all the other members present, and the hope was expressed that the Bill was only an instalment of a more complete and comprehensive measure, to be introduced at an early date. The feeling of the meeting was eventually embodied in the following resolution, which was proposed by Mr C. Thompson, seconded by Mr. F. H. Prosser, and carried without dissent:—

That we, the Council of the Midland Pharmaceutical Association, having considered the Pharmacy Acts Amendment Bill, are of opinion that it is a step in the right direction, and it shall receive our support.

A discussion followed as to the advisability of waiting upon the members of Parliament for the city and district to ascertain their opinions on the Bill, but it was decided to wait until it was known when the Bill was likely to be introduced into Parliament.

STRYCHNINE FOR GLAUBER'S SALTS.—Sister Ste. Ursule, the dispenser at the Ursuline Convent, Three Rivers, Quebec, had two prescriptions to make up on January 28. Sulphate of strychnine was used in one and sulphate of soda in another. The latter was for Sister Ste. Brigitte. During a fit of absence of mind the dispensing sister put sulphate of strychnine in both prescriptions, and gave Sister Ste. Brigitte 2 dr. in 4 oz. of water. She was soon seized with a succession of nervous spasms, asphyxia following, and she died before a doctor arrived. The coroner's jury returned a verdict of accidental poisoning.

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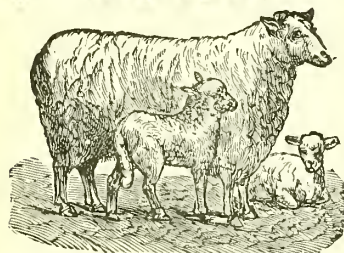
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See Diary, 1898, pages 21, 22, 23 and 24.



ALCOHOLIC EXTRACTS.

We are indebted to several manufacturers for sympathetic letters in regard to the suggestion which we made last week as to a countervailing duty upon imported alcoholic extracts. Our inquiries show that the grievance is a very real one, and there seems to be no doubt whatever that British manufacturers have been losing business because they could not meet, without loss, the prices of their foreign competitors. The loss is all the greater owing to the fact that these alcoholic extracts are often merely items in general orders. We understand that the wholesale trade, through the Drug Club, and in association with the Chemical Section of the London Chamber of Commerce, have been considering the matter as part of a larger question, for some time, and the Excise authorities are not indisposed to consider reliable data upon which equality between British and foreign manufacturers may be established. Such data as the following, for which we are indebted to a manufacturer, are sufficient to

show to what extent the British manufacturer is at a disadvantage compared to the user of duty-free alcohol:—

Etouymia.—In making 86 lbs. 20 gals. of spirit was lost, equal, at 1s. 9d. per gal. (the cost in first hand of methylated spirit), to 5d. per lb. of the product, as compared with 2½d. per lb. when duty-free pure spirit at 9d. per gal. is used. If rectified spirit were used in this country, as in Germany, the loss would be 4s. 4d. per lb. as compared with the German 2¼d.

Extract. Belladonnae Alcoholic.—In making 24½ lbs. 10 gals. of spirit was lost, equal to a loss of 9d. per lb., as compared with 3½d. per lb. in Germany.

Extract. Cannabis Indica.—Twelve and a half gallons lost in producing 23½ lbs. of extract, which equals 11¼d. per lb., as compared with 4¾d. per lb. in Germany.

Extract. Gelsemii showed a loss of ½ gal. (cost 10½d.) for every pound produced, or 6d. more than the German manufacturer loses.

Such examples could be considerably extended, but we only give sufficient to show that our manufacturers are heavily handicapped; and in view of the fact that the Board of Inland Revenue have in similar cases imposed a countervailing duty, we suggest that, without going into the larger question of duty-free alcohol in the meantime, this question of alcoholic extracts should be definitely brought forward and settled. It will be necessary in approaching the Excise authorities to furnish them with such data as those given above, and we should be glad if manufacturers would assist in the matter by making special observations during the next few weeks. The authorities have shown, in so recent a case as cocoa-butter, that they are willing to establish equality between the British and foreign manufacturer, even although the advantage to the latter may only be a fraction of a penny on the pound, and in the earlier and more kindred instance of transparent soap when 3d. per lb. was imposed, they virtually saved a small but essentially British industry. The alcoholic extracts are far more important than either of these things, and, unhappily, the manufacture of them in this country is rapidly diminishing for the reasons given. All the more reason, therefore, that action should be prompt.

ACONITINE AND ITS DERIVATIVES.

PROFESSORS THEODORE CASH AND WYNDHAM R. DUNSTAN have recently communicated to the Royal Society a lengthy paper on the pharmacology of aconitine, diacetylaconitine, benzaconine, and aconine considered in relation to their chemical action. It is a continuation, practically the completion, of the research on the constituents of *Aconitum Napellus* root, the chemistry of which comes into the paper only incidentally, but the authors make rather an important statement in the following paragraph:—

Neither the composition nor constitution of aconitine can be regarded as settled. In determining the exact formula by which the composition is best expressed, there is the difficulty of deciding between several formulæ which represent the composition of the alkaloid within the limits of experimental error. Alder Wright adopted the formula $C_{55}H_{45}NO_{12}$ as best expressing the composition. Later observers, Jürgens, Lübbe, and ourselves, have so far accepted a formula identical with or differing but slightly from that of Wright, as indicating the composition of aconitine and its derivatives. Recently Freund and Beck have proposed for aconitine the formula $C_{54}H_{47}NO_{11}$, instead of that employed by us, $C_{55}H_{45}NO_{12}$, since they have obtained from the ultimate analysis of the pure alkaloid nearly 2 per cent. more carbon than was found by Alder Wright and his colleagues, by Jürgens, by Lübbe, or by ourselves. The question of composition is therefore still unsettled, and can probably only be finally decided by the analysis of simpler derivatives of aconitine than have been hitherto dealt with. The constitution of aconitine cannot be con-

sidered until more is known of the simpler derivatives and decomposition-products. For the purposes of the present discussion it may be regarded as acetylbenzaconine, but nothing is at present known of the constitution of aconine.

The empirical formula of aconine is $C_{21}H_{39}NO_{10}$; replace one of the hydrogens in it with a benzoyl radicle, and we get benzaconine, $C_{21}H_{38}(C_6H_5CO)NO_{10}$; replace another hydrogen with the acetyl radicle, and we get acetylbenzaconine or aconitine, $C_{21}H_{37}(CH_3HO)(C_6H_5CO)NO_{10}$; and diacetylaconitine has been made by replacing other two hydrogen atoms in the last formula with $2CH_3HO$. Professor Cash has made exhaustive physiological experiments with all these substances, and finds that the lethal doses are as follows, the results being stated in decimals of a gramme per kilo. of the body-weight:—

	Cat	Rabbit	Guinea Pig	Prog. (R. Temp.)
Aconitine	0.000134	0.000139	0.00012	$\left\{ \begin{array}{l} 0.000586 \\ \text{(March)} \\ 0.0014 \\ \text{(July)} \end{array} \right.$
Diacetyl-aconitine	0.004—0.00515	0.0042	0.0042	0.039
Benzaconine	0.0245	0.0272	0.0238—0.0293	0.284
Aconine	0.166—0.4	—	0.275	1.055—1.75

The results obtained with aconitine confirm previous observations, it being shown that death from it in mammals is due to central respiratory failure. The introduction of two acetyl groups into the molecule has simply the effect of weakening the action of the alkaloid, but the removal of the original acetyl group has a startling effect, for in benzaconine the characteristic features of aconitine action are almost entirely annulled, and the great toxic power so reduced as to remove the substance from the class of poisons in the ordinary acceptance of the term. Indeed, it acts to some extent as an antidote to the action of aconitine on the heart, but there is little difference between it and aconitine so far as action on the respiration and temperature is concerned, both lowering the temperature to such an extent as to account for the estimation in which aconite is held as an antifebrile remedy. After withdrawing the benzoyl group, and coming down to aconine, we get a substance which may be ranked as a general cardiac tonic, and in virtue of this action it is so powerful an antidote to aconitine that the administration of aconine is successful in averting, in small animals the effect of a lethal dose of aconitine. The results of the inquiry therefore bring out in a striking manner the almost complete dependence of the extraordinary toxic power and pharmacological action of the aconitine molecule on the presence of the radicle (acetyl) of acetic acid, while the action of benzaconine depends in a like manner on the radicle (benzoyl) of benzoic acid. The inertness of the alkaloid aconine, denuded of both the acetyl and benzoyl groups of aconitine, is one of the most interesting facts which have been elicited since chemistry and physiology have joined together in order to advance pharmacology. Moreover, the fact that aconine and benzaconine exist in aconite-root along with aconitine, and in variable quantities, supplies one of the best examples of natural antagonism in medicine. There is much in the communication which cannot appropriately be discussed in these pages but, obviously, it goes a great way to justify the research.

OUR RELATIONS TO THE PHARMACEUTICAL SOCIETY.

THE Cambridge Pharmaceutical Association had their annual dinner last Thursday, with the President of the Pharmaceutical Society of Great Britain as their principal guest. With catholic hospitality they also entertained the Secretary of the Proprietary Articles Trade Association and the editors of three drug-trade journals from London, together with several local medical practitioners. There was a long programme of speeches after the dinner, and towards the end, early the next morning, "The Pharmaceutical Press" was proposed. To the editor of the *Pharmaceutical Journal* fell the duty of first responding to this toast. That gentleman "felt it his duty" to improve the occasion by delivering himself of a vigorous protest against the editorial conduct of this paper. His sense of duty must have been very urgent to prompt him to such an effort at such a time at the sacrifice of the ordinary courtesy which a guest owes to his hosts. The attack, which had evidently been prepared, revolved round the central charge that this journal adopted an attitude of unreasonable opposition to the Pharmaceutical Society, and reached its climax in the suggestion that we were approaching the character—if, indeed, we had not already attained it—of "what Bismarck had once described as a reptile press." This was a singularly inapt quotation, because the "reptile press"—the *reptilien presse*, as it is called in Germany—is the term applied there to the official journals, whose business it is to support the Government in its policy, right or wrong.

We allude to this criticism for two reasons—first, because the opinion of such an experienced editor is worthy of respect; and, secondly, and chiefly, because we are aware that a charge of unfairness towards the Pharmaceutical Society, and the attribution of a sort of trade-jealousy on our part, is not unfrequently made by pharmacists to our prejudice. We have waited for this accusation to be made with some authority to reply to it, for perhaps our general practice of ignoring silly allegations is likely sometimes to lead to misapprehension.

We do not expect readers to watch and weigh very closely the opinions expressed in a journal. They read now and then, it may be, an adverse comment on the policy of the Council of the Pharmaceutical Society, and they assume that this is the invariable tone. They also read something in a letter published in these pages, and it is not at all surprising that they should mix up such expressions with the editorial opinions. Lastly, it is the fact—and this applies to speaking as well as to writing—that a controversial note attracts more attention than any amount of smooth harmony.

Thus we have come to be regarded in some quarters as "the organ of the opposition." We have no ambition for that distinction, and we do not deserve it. We agree with the Council of the Pharmaceutical Society much more often than we disagree with them, and we have many times advocated their aims. Again and again we have supported them against the criticism of their own members, and have pointed out that they cannot be expected to be omnipotent. We criticised their indifference to the Pharmacy Act for many years, and we, more than anybody else, were instrumental in getting the High Court judgment which gave the qualifying certificate its value. Since then we have many times recognised the combined energy and discretion with which they have administered the statute. We regarded their wild expenditure of five to ten years back with amazement, and we sometimes preached economy. Surely we were not far wrong in those reproaches, and we believe our com-

ments in this respect were conceived in the Society's interests. We protested with all our force against the injustice of the lately-sanctioned by-laws, and we protest still against the parrot-cry, so often repeated by persons who ought to know better, that the members of the Society are paying the costs of administering the Pharmacy Act. It was the by-laws controversy which furnished the text of Dr. Paul's harangue at Cambridge. This, as far as we could gather from his published comments, the editor of the *Pharmaceutical Journal* never understood; but, however this may be, we should have thought that he, representing the victorious side, would have been content to let it alone.

Earlier in the evening the President of the Pharmaceutical Society protested against a remark which appeared in this journal concerning the Pharmacy Bill, to the effect that its object seemed to be more guineas, and not much besides. We confess we cannot get up any enthusiasm over this Bill. It is a distinct reversal of the policy of the founders of the Pharmaceutical Society, which, we understand, was to create from among the ranks of chemists and druggists a class of men who should raise the practice of pharmacy to its highest level compatible with the service it owed to the public. It is true that Jacob Bell looked forward to the time when the whole trade should be included; but he never dreamed of any way of doing this except by levelling up. This Bill professedly adopts the method of levelling down. Here, too, is another instance of the way we have supported the Council against a number of their constituents in their resistance to the demand for some new title, such as a fellowship; but we confess that we cannot defend their consistency, for it is difficult to see why those who advocate a "student associateship" should hesitate to accept a "fellowship." In our view both are equally unworthy of the Society. If sufficient pressure should be put upon the Council, it is not at all unlikely that a "fellowship" clause may be added to the Bill, "for the sake of unanimity." If we then remain consistent to our present opinions, we shall, no doubt, be again charged with unreasonable opposition to what the Council regard as good for the trade.

No one can truthfully allege that THE CHEMIST AND DRUGGIST has ever suppressed any material argument on any question of policy because it was not in accord with the views of the conductors of this journal. That seems to us the main thing. If opposing views are expressed either in our editorial or correspondence sections, these are to be taken only for what they are worth. Chemists are an intelligent body who will certainly know how to appraise "unreasonable" opposition. As for trade jealousy, let this be said:—Last year we fairly and openly expressed our complaint of what, as we showed, amounted practically to a national subsidy in aid of the *Pharmaceutical Journal*. That we still object to. Beyond that our only desire has been for the past forty years to get as much benefit as possible for the trade out of the reputation, the wealth, and the great opportunities which the Pharmaceutical Society enjoys.

USES FOR AERATED-WATER BOTTLES.

In an advertisement inserted in the *Brighton Argus* of February 10 a local firm of mineral-water makers, Messrs. Shelvey & Co. (Limited), appeal to the public to treat their empty bottles, especially the screw-stoppered ones, with more respect. They state that on January 29 last they received from a certain place 176 dozen of "empties," and out of this number thirty-nine dozen were destroyed—so far as their business is concerned—by careless and unfair treatment. On examination it was found that, before being returned as "empties," they had been made receptacles for

carbolic acid, paraffin, turpentine, linseed oil, medicine of different sorts, benzoline, neatsfoot oil, paint, varnish, &c., and used as a candlestick.

METRIC WEIGHTS AND MEASURES.

Although metric weights and measures have been legalised for trade-purposes in this country, it seems to be impossible, as we have already indicated, to use such weights and measures until they are officially verified and stamped. Up to the present inspectors of weights and measures are unable to do this, because they have not received the necessary standards from the Board of Trade, and the Board in its turn cannot move until her Majesty in Council has approved the new denominations which were adopted by the Board last year on the advice of the International Bureau in Paris. The denominations referred to differ in equivalence from those at present recognised and used in this country. The differences are slight, but sufficient to ensure rejection of weights and measures which do not accord with the new standards. Those who have not hitherto used the metric system, and propose to do so, will therefore find it to be wise to wait until they obtain verified and stamped weights and measures, especially as the use of unstamped ones for trade-purposes is illegal. We hope to give prompt notice of the ability of inspectors to stamp the weights and measures.

INFLUENZA AGAIN.

Influenza is once more very prevalent in certain parts of London and the provinces, and is adding to its reputation for mystery by appearing in a new form. This year it is causing great disturbances of the digestive system—so severe, in cases, as to lead to the supposition that the patient is suffering from typhoid fever. The outbreak at the Warwick Asylum, which looked at first very like food-poisoning, turns out to be our old friend in this new kaleidoscopic guise. Last year, it will be remembered, it affected the nervous system, leaving its victims in a depressed condition physically and mentally, whilst its serious ravages on the respiratory system were a feature of another visitation. To prevent the spread of influenza by means of isolation, as we do in other infectious diseases, is advocated in some quarters, but the hopelessness of carrying out an effectual isolation must be apparent to everyone, and has failed in cases where it has been rigidly carried out.

"QUININE GOING UP."

The *Manchester Evening Chronicle* has made some remarkable discoveries in regard to quinine, the more believable of which we reproduce in the following paragraph:—

The price of quinine has been going up for some time past. One reason for this is the increased difficulty of getting supplies of Peruvian bark from abroad. Fresh soil is all the while required for the cultivation of the cinchona-tree, and, for lack of care in this respect, some of the grounds where it has been grown are becoming exhausted. In its wild state, too, the cinchona is less rarely found than formerly. Another thing which causes quinine to be dear is its liability to rapid deterioration. It deteriorates so quickly—and with such possibly serious consequences in some cases—that some London druggists actually destroy their surplus stocks at short intervals. One of our leading dispensing chemists has a fresh supply of quinine every day, and keeps each day's supply separately. Stock that has been kept unsold for three days is immediately thereafter destroyed.

There may be some wholesale druggists in London or elsewhere who feel disposed to give the *Chronicle* the benefit of their experience. We ask them to forbear. A correspondent of ours who felt that way was rash enough to unbosom himself to the *M.D.C.*, and he was snubbed. "The information is obtained from 'a leading specialist,'" before whom retail and wholesale druggists, quinine-manufacturers, and all others who know anything about it must quake.

ANALYSTS AND THE GOVERNMENT ADULTERATION BILL.

The Society of Public Analysts has got out a report on Mr. Chaplin's Sale of Food and Drugs Bill of last year. The miserable inadequacy of that Bill to fulfil the recommendations of the Select Committee which had sat during three sessions was pointed out in this and other journals six months ago, and, whatever else may be done, that Bill is dead enough. The Society of Public Analysts must be a little smarter than this if they want to influence legislation. Of course they object to the Bill on the grounds we have indicated, and especially because the suggestion of the Court of Reference is not adopted. This was the proposal of the analysts, and was first intended by them to become a substitute for the Inland Revenue Laboratory. Their aims were made manifest a little too early, and latterly the Court of Reference has assumed a very different character. We doubt if it offers any advantage to anyone in the form in which the Select Committee recommended it, but in any case its constitution will have to be carefully watched.

DOESN'T WORK BOTH WAYS.

The *Medical Press*, commenting on the case which we reported last week of a Paris pharmacien who was fined for selling methylacetanilide when exalgine was prescribed, says that

from a medical point of view, it is open to question whether we shall not all be gainers if the pernicious practice of pushing such articles à l'outrance were discouraged. Were it not for the facilities offered by the law for the acquisition of an exclusive right to the use of particular designations, manufacturing chemists would hardly find it worth their while to "run" them, and practitioners would not be overwhelmed by the avalanche of new products forced on their notice by the fertile ingenuity of rival manufacturers.

But a little later on it says to a correspondent,

If you have proof that a chemist dispenses a substitute for the proprietary article prescribed by you, you are entitled to complain, even though, chemically, it is reputed to be identical. The simplest course would be to call the attention of the manufacturers to the delinquency, and they may be trusted to safeguard their interests and yours in the matter.

So that, after all, we are left in doubt as to what our contemporary really would like. Perhaps the one case taking place in Paris and the other in Ireland makes the difference.

HOMOGENEITY OF HELIUM.

Professors Ramsay and Collie once made some experiments which seemed to indicate that helium consists of two kinds of molecules, some light and some heavy. Towards the end of the paper the conjecture was hazarded that it was not beyond the bounds of possibility that the systematic diffusion of what we are accustomed to regard as a homogeneous gas—for example, nitrogen—might conceivably sift light molecules from heavy molecules. The learned observers did not explain how such a statement fits in with the law that matter is composed of molecules equal in size and weight, placed equidistant from each other in space, and constantly bouncing against each other, which is a pretty safe law, but a wretched one for things with unequal sized molecules. However, light helium need not be afraid of being knocked out of existence by the heavier, for Professor Ramsay and Mr. M. W. Travers have found argon in the heavier variety, which accounts for the difference. A paper to the Royal Society has settled this. We imagine that if anybody except F.R.S.'s had spoken of light and heavy molecules of one and the same element, he would have been laughed out of court.

A NUMBER OF PAYSICIANS IN PATERSON, N.J., propose to establish a drug-store of their own, where their prescriptions may be accurately dispensed, and the druggists of that town naturally do not like either the stores or the inference that they do not dispense accurately.

Sir W. Crookes on Argentaureum.

THE *Evening News* publishes an interview with Sir William Crookes, F.R.S., in reference to the discovery of a process for converting silver into gold, or rather into argentaureum, which Dr. Emmens, of New York, says he has made. According to the *Evening News* Dr. Emmens has communicated to Sir William Crookes the details of his process.

"It is quite true," said Sir William in answer to the first question put to him, "that Dr. Emmens has communicated to me, under a pledge of secrecy, the details of his process. It is long and tedious, and I have not yet attempted to carry out any experiments, but I intend to do so."

"Do I believe in it? I can only say that I am neither willing to assert my belief or disbelief. I have seen so many seemingly impossible things accomplished that I am not prepared to say that this is impossible; still less am I prepared to say that it is possible without ample and convincing proof."

"It is true that Dr. Emmens has sent me a sample of his product, and that I have analysed it, and found it to be gold. Hasty people have jumped to the conclusion that that is a proof of the truth of Dr. Emmens's statements. It is nothing of the kind. It only proves that what I analysed was gold, and not that Dr. Emmens made the gold out of silver."

"And does the process pretend to be a commercial success?" I asked.

"Oh, yes. Dr. Emmens says he can make gold at a cost of 2*l.* per oz., which would yield a profit of over 2*l.* per oz. at the present price of gold. The sample which he sent me contained about 20 per cent. of gold, about 18 per cent. of silver, a small percentage of copper, and traces of other metals. The general idea of the process is great pressure, constant hammering, and intense cold—that much Dr. Emmens has made public—but there are many details which I am bound to keep secret and without the knowledge of which nothing can be done. In Mendeléeff's table there is a missing element between gold and silver. In this table all the elements were put, as it were, into pigeon-holes, but there were some pigeon-holes that were left empty. Mendeléeff described the properties and even the colours of the missing elements, and three of these elements have since been discovered, and have been found to confirm his views."

"Did argon fit in?" I asked.

"No," was the answer; "argon and helium do not fit into the Mendeléeff table at all. But, as I was telling you, there is a missing element between gold and silver, and this element, which he has christened argentaureum, Dr. Emmens claims to have discovered. I pointed out to Dr. Emmens that every known element has certain distinctive lines in the spectrum, and the specimen which he sent to me gave no new lines whatever."

"Dr. Emmens thought that in the specimen which he sent to me the process might have been continued till the argentaureum was converted into gold. I asked for a specimen in which the process was only half-completed, but I have not yet received one."

"There is another man, a Frenchman," continued Sir William, "who claims to have done the same thing as Dr. Emmens. I am under no pledge to keep his process secret. He took Mexican dollars:—Dr. Emmens also uses Mexican dollars for his process—and dissolved them in nitric acid. There was a residue of gold, and he claimed to have made it. We poor chemists, who didn't know as much about it as he did, believed that it had been there all the time. There is always a certain amount of gold in the Mexican dollar, especially in the older coins."

"But that," I said, "would not account for the 80 per cent. of gold in Dr. Emmens's product."

"No," was the answer, "of course it would not. Dr. Emmens's gold is either the greatest fraud or the greatest scientific discovery of the century."

Personalities.

BROTHER J. B. HUDS, chemist, of Hebburn-on-Tyne, was installed Worshipful Master of the Perseverance (1643) Lodge of Freemasons at Hebburn, on February 9.

DR. CLOVES, on his retirement from the Professorship of University College, Nottingham, is to have the title of Emeritus Professor conferred on him by the governing body.

MR. PEAK, chemist, and druggist, who carried on business in New Bridge Street, Dover, for many years, has intimated that he will not seek re-election on the Kent County Council this year.

MR. ARTHUR J. SEWARD, son of Mr. S. M. Seward, proprietor of the Rosmarine Manufacturing Company, London, sails for Sydney early next month to establish a branch for the sale of their Petal Dust and other specialities.

MR. WILLIAM JUDD, of Messrs. Judd & Manners, has been re-elected to the Bromley School Board at the head of the poll, the honour being all the greater for the fact that this happened during his absence on a tour in the South of Europe and Egypt.

THE chemists who are candidates for the London County Council are Lieut.-Colonel Probyn (M.) (Hooper & Co., Pall Mall and Grosvenor Street), for the Strand; Mr. T. H. W. Idris (P.) (Idris & Co., Limited), for North St. Pancras; and Mr. R. A. Robinson (M.) (Malden & Co., 195 Brompton Road, S.W.), for South Kensington—all present members of the Council. Mr. C. Goddard Clarke, J.P., is a Progressive candidate for Peckham. He is a member of the firm of Potter & Clarke, of Artillery Lane. Mr. B. Strauss, a Progressive candidate for Mile End, is a member of the firm of Hale & Son, Fenchurch Avenue.

Trade-Marks Applied for.

Anyone who objects to the registration of a trade-mark must address the Comptroller-General, Patent Office, Chancery Lane, W.C., within a month of the date of publication.

From the "Trade Marks Journal," February 9, 1898.

"MOURTABS"; for all goods in Class 3. By Armour & Co., 59 Tooley Street, S.E., packers and merchants. 210,072.

"CARGONA" for a medicinal preparation for human use. By L. W. Nathan, 184 Adelaide Road, N.W., retired civil servant. 210,107.

"ASBEROCO"; for a preparation (for human use) for the relief or cure of coughs and kindred affections. By W. J. Gibbs, 48 Gresham Street, E.C. 210,635.

"MOURINE"; for all goods in Class 47, but not including preparations for removing spots from textile fabrics. By Armour & Co., 59 Tooley Street, E.C., packers and merchants. 210,071.

"MONEYBAG"; for all goods included in Class 47, also in Class 48. By the United Alkali Company (Limited), Hazelhurst Works, Runcorn, manufacturers. 210,530 and 210,531.

"MIDNIGHT" and "REDBREAST"; for all goods included in Class 48. By the United Alkali Company (Limited), Hazelhurst Works, Runcorn, manufacturers. 210,529 and 210,533.

(From the "Trade Marks Journal," February 16, 1898.)

Device surmounted by word, "Bayard's"; for all goods in Class 3. By Bayard, Sons & Bayard, 26 Bridle Lane, Golden Square, W., manufacturing chemists. 208,033.

"FRUGAL"; for medicated soap for human use. By Lever Brothers, Port Sunlight, Birkenhead, soap-manufacturers. 208,815.

"OMYZO"; for a medicine for human use. By A. F. Hartshorn, 3 Thessaly Terrace, New Road, Battersea, S.W., chemist. 210,042.

"CREMONTINE"; for petroleum jellies prepared for use in medicine and pharmacy. By L. Le Brocqy & Co., Greenmount Oil and Chemical Works, Harold's Cross, Dublin, manufacturers. 210,634.

Signature of firm; for trusses. By Salmon, Ody & Co., 292 Strand, W.C., surgical-instrument manufacturers. 210,149.

LIEUT.-COLONEL PROBYN (Hooper & Co., Pall Mall) is to be Grand Treasurer of the Grand Lodge of Freemasons of England and Wales for 1898-99, in succession to Mr. Alderman Vaughan Morgan. He was nominated in December last, and, as there has been no opposition, he will be formally elected on March 2 next.

Legal Reports.

J. J. COLMAN v. COLMAN AND ANOTHER.

IN the Chancery Division of the High Court on February 11, a motion in this case, which relates to the well-known mustard trade-marks, came before Mr. Justice Romer. Mr. Neville, Q.C., for the plaintiffs said there was a motion for an injunction, and an order had been arranged between the parties, the terms of which he need not mention beyond saying that the motion was to be treated as the trial, and a perpetual injunction and a certain sum paid to cover all damages and costs.

SALE OF FOOD AND DRUGS ACT.

SALE OF SEIDLITZ-POWDERS.

AT Brentford Police Court on February 10, Charles Hopgood, of Coningsby Road, Ealing, provision and general dealer, was summoned for having sold to Inspector W. Tyler a seidlitz-powder not of the nature, substance, and quality demanded. Mr. C. Robinson, solicitor, appeared to defend.

The evidence showed that Inspector Tyler, calling at the defendant's shop, saw seidlitz-powders exposed for sale, and purchased one. The defendant, on the usual questions being put, declined to have the packet divided, and it was sent intact to the official analyst. His certificate was as follows: "I am of opinion that the white packet contains an excess of tartaric acid to the extent of 23 per cent., and the blue packet is deficient in the mixture of bicarbonate of soda and tartarated soda to the extent of 29 per cent." By the British Pharmacopœia the compound should be constituted as follows:—Blue packet—tartarated soda, 120 gr.; and bicarbonate of sodium, 40 gr. White packet—tartaric acid, 38 gr.

The Chairman: And what is the effect of taking away in one and adding to the other?

Inspector Tyler: It would require a bigger dose to have the desired effect.

Mr. Robinson said he could not dispute the facts, but there was nothing in the powders likely to do injury. The defendant sold the powders just as he received them. He was bound to do this, and to trust to the honesty of the makers, for he had not the special knowledge to enable him to know if the powders were of the required strength.

The Chairman: Of course he is not a chemist. If it had been sugar or tea he would have been presumed to know, as part of his trade, if it was of the required standard. This is one of the evils of unqualified people dealing in drugs.

Mr. Robinson: He is bound to sell them to compete with others.

The Chairman: And the public are the losers. There has been an offence here, and defendant must pay a fine of 2s. 6d.

HYPODERMIC INJECTION OF MORPHIA.

AT the Kensington Petty Sessions on Tuesday, Mr. W. Bird, D.L., in the chair, Mr. Charles Bridges, chemist, 24 Sloane Street, W., was summoned by the Chelsea Vestry for selling injectio morphinae hypodermica, B.P., which was deficient to the extent of 25 per cent. in acetate of morphine. Dr. Parkes, Medical Officer of Health, appeared for the Vestry, and Mr. H. E. Barren, solicitor, for defendant.

Inspector Grant stated that on January 27 he went to defendant's shop, and left a prescription for injectio morphinae hypodermica to be made up. The assistant told him that it would take about half an hour to prepare. He left, and on returning found the prescription had not been made up; so he waited. Eventually it was handed to him, and he then explained who he was and the purpose for which the article had been purchased. He now produced the public analyst's certificate showing that the article was 25 per cent. deficient in morphine.

Cross-examined: He did not know that morphine was very seldom asked for, nor that its quality very soon deteriorated.

Mr. Barren proceeded to explain to the Bench that the article in question was a compound drug.

Mr. Bird: But it is a "drug" within the meaning of the Act.

Mr. Barren: It is a pharmaceutical preparation, and it is impossible in making it to be sure of retaining its full strength. It is also a drug that cannot be kept in stock, for morphia is more or less insoluble when it is kept.

Mr. Bird: Do you, then, contend that the article cannot be made properly?

Mr. Barren: Yes, sir. You may take dozens of preparations, and they are all likely to come out differently. Some say that twenty-four hours should be taken for heating it, as it cannot readily be broken up. As far as science at present knows, there is no way of keeping the drug properly. It goes off in twenty-four hours. My client has been in business for twenty-eight years, and never had a summons like this before.

Mr. Charles Bridges, the defendant, a qualified chemist, stated that it was not possible to make the injection according to the formula directed by the British Pharmacopœia. When experiments were made, the results were invariably different.

Mr. Bird: Then those who sell it run the risk.

Defendant added that the article was scarcely ever asked for. Its character was exceedingly changeable. It was chiefly used by surgeons, who generally used the morphia pellets, and made the preparation as they wanted it.

Mr. Barren: I think it is clear that there was no intention to defraud.

Mr. Bird: Oh, no, we do not say that.

Defendant remarked that altogether only 34 gr. of morphia were used in the preparation.

Mr. Bird: But the question is, Did the inspector get what he asked for? Was it pure, and was it properly made up? It appears from the Public Analyst's certificate that such was not the case.

Mr. Barren: But, sir, as defendant says, it is not possible to ensure it being of a certain quality.

Mr. Bird: Then attention should be drawn to the fact, and the British Pharmacopœia directions remedied.

Defendant was fined 5s. and costs.

Mr. Thomas Doble, chemist, 45 Cadogan Street, W., was summoned for a similar offence, the deficiency in this case being 32 per cent.

A similar defence was put forward.

IODINE APPLICATIONS.

A SECOND summons had been issued against Mr. Doble for selling an iodine liniment which was 38 per cent. deficient in strength of potassium iodide.

Defendant said that the article was ordered hurriedly, and he was afraid due care had not been taken in preparing it.

A fine of 5s. was imposed, with costs.

Mr. William Spurling, chemist, 187 Marlborough Road, W., was summoned by the Chelsea Vestry for selling linimentum iodi, tinctura iodi, equal parts, deficient to the extent of 59 per cent. of free iodine, and to the extent of 12 per cent. potassium iodide.

The defence was that an assistant had upset the articles while mixing them. Defendant had been in business in Chelsea for twenty-seven years, and the assistant had been with him for upwards of ten years.

Defendant was fined 5s. in each case, with costs.

BORACIC ACID IN BUTTER.

AT Pontypridd on January 16 the boracic acid in butter case of Mr. Williams (President of the Pontypridd Grocers' Association) which had been adjourned for a month in order to have an analysis made by Somerset House, was proceeded with. It was now shown by the analysis that the butter contained a little over 8 per cent. of boracic acid, and the Bench fined defendant 2l. and 4l. odd costs.

COUNTY COURT CASES.

A SEQUAH'S VAN.

AT the Mountain Ash County Court on February 10, before his Honour Judge Gwilym Williams, an action was brought by James Westray to recover from a travelling toothache and rheumatic curer, trading under the title of "Sequah," the

sum of 6*l.*, balance due on the sale of a van. Plaintiff alleged that the defendant bought a van from him for 15*l.*, of which he paid 9*l.*, promising to forward the balance. This, however, he neglected to do. Defendant said the purchase-price agreed upon was 9*l.*, and produced a receipt purporting to be signed by the plaintiff for that amount. Plaintiff swore that this receipt was not signed by him, and called two witnesses, who said they heard defendant promise to send the balance. His Honour, after comparing the signatures, said he did not believe in the evidence of experts on handwriting. He thought the plaintiff had proved his claim, and gave a verdict in his favour, with costs.

WHO OWNED THE PRESCRIPTION?

ON February 8, in the Birkenhead County Court, before Judge Wynne Foulkes, Mrs. Emma Thorne, of Liscard, claimed from Mr. Arthur Dand, chemist, 61 King Street, Egremont, the return of three prescriptions, or 5*l.* for their value, and 5*l.* for detaining the same. Mr. Ross Brown appeared for the plaintiff, and Mr. Collingwood Hope (who was instructed on behalf of the Liverpool Chemists' Association) was for the defence. It appeared that Dr. Napier had been attending a patient, and had written out the prescriptions for the medicine in Mr. Dand's shop, and the medicine had been supplied, for which an account amounting to 16*s.* 2*d.* had been sent in, and had not been paid. On Dr. Napier visiting the patient he asked to see the prescription, and was told that it was not there. He then told Mrs. Thorne she had better ask for it. Several visits were paid to Mr. Dand's shop for this purpose by the plaintiff and her brother, Mr. Lancaster, and Mr. Dand on one occasion promised to send it by a boy. Later on Mr. Lancaster called, and said their solicitor had written, saying that the prescriptions were to be given up, to which Mr. Dand replied that the solicitor had written under a misapprehension, and that he could not say anything further.

When the plaintiff's case had concluded, his Honour said it was a great pity that the action could not be settled. He could quite understand why the prescriptions were not handed over, but he thought the matter might be settled by proper safeguards being introduced. They might be given up on certain conditions, and then the account might be paid.

The parties, having consulted, were unable to come to an agreement, and Mr. Collingwood Hope then submitted that the plaintiff had not established her case. Although it might be quite true that the doctor had told her to send for this prescription, a verbal authority communicated to the plaintiff, and not communicated to the chemist, in law and in fact afforded no justification to his client. It was not a communication from the principal, who was the doctor.

His Honour said in the absence of the authority of the doctor he must give judgment against the plaintiff.

Mr. Ross Brown applied for an adjournment, but his Honour declined, and said he should nonsuit the plaintiff. She had not made out her case.

MEDICAL MEN AND DEATH CERTIFICATES.

DURING the hearing of a case at Shrewsbury County Court on Monday, in which Messrs. Whitwell & Co., surgeons, sued a labourer for 16*l.* 17*s.* for medical attendance, the defendant informed the Judge that he signed a paper promising to pay the money on a certain occasion because Dr. Whitwell refused to give him a death certificate until he consented to do so. His Honour said that if the death certificate was withheld until the defendant signed the paper it was a matter for inquiry. Defendant swore that what he had said was true, and His Honour considered it necessary to adjourn the case for the attendance of Dr. Whitwell.

HIRING CARBONIC ACID GAS TUBES.

IN the City of London Court, on Wednesday, before Mr. Commissioner Kerr and a jury, Messrs. Uhlmann & Keutgen, 15 Cooper's Row, sought to recover from Mr. A. Lipman, 23 Brick Lane, the sum of 8*l.* 3*s.* 5*d.* for the hire of thirty-six car-

bonic-acid tubes, and for the value of one of them which it was alleged had not been returned. Mr. Gray appeared for the plaintiffs, and Mr. Osborn for the defendant. The plaintiffs' case was that in March last the defendant ordered twelve tubes of carbonic-acid gas to be supplied. They were sent, but the defendant was told that if he retained the tubes more than thirty days he would have to pay 3*d.* per day per tube for the hire. Tubes had been kept by the defendant for much longer periods than the thirty days, and the hire-money was now claimed. The defendant and his wife had both been sued, as it was not known whether he or she was the owner of the business where the carbonic-acid gas was used, the London Directory giving her name as the proprietress. Mr. Osborn said the wife had nothing to do with the business. It was denied that the defendant had ever agreed to pay for the hire of the tubes, or had been told that he would have to do so. Mr. Commissioner Kerr said he would strike out the wife's name from the proceedings. It was always better to have a man to fight against in legal proceedings, because, if he did not pay, he might be sent to prison, whereas no such order could be made against the wife. Women had many privileges that they little knew of. After the evidence had been called, the jury stopped the case, and found for the defendant, who was allowed the costs.

DAMAGES AGAINST A LADY "DENTIST."

MRS. ROSE GOODHEAD, of Tonge, sued Mrs. Alice Mitchell, Silverwell Street, Bolton, at Manchester Assizes on February 9, claiming 300*l.* damages for alleged negligence in extracting a tooth. The plaintiff's counsel stated that the defendant falsely represented that she was a dentist, and in consequence the plaintiff submitted herself to examination by the defendant for the extraction of a tooth, and the defendant had caused her injuries and damage. Defendant's late husband formerly carried on a dentist's business in the town, and after his death defendant, who was not qualified, continued the business. In this case it was said she made one or two attempts to pull the tooth out, but only broke it. Much injury resulted, and the plaintiff had to go to the Dental Hospital. The defendant in her evidence stated that up to her husband's death she had assisted him in his dentistry, and since then she had continued to draw teeth. She alleged that she told the plaintiff she did not think she could get the tooth in question out, and that plaintiff asked her to try, as the doctor had ordered her to have the stumps taken out. She made an attempt with the lower forceps alone, and this was perfectly clean. She also said that she did not profess to be a dentist, but she got her living by it. Plaintiff was awarded 35*l.* damages.

Gazette.

PARTNERSHIPS DISSOLVED.

Arnall, E. G. P., and Stephens, S. L., under the style of Arnall & Stephens, Bodmin and Wadebridge, Cornwall, veterinary surgeons.

Barlow, W., and Fogg, S., under the style of Barlow & Fogg, Little Lever, Lancashire, mineral-water manufacturers.

Hale, M., and Thompson, G., under the style of W. H. Hale & Thompson, Mark Lane, E.C., and Abbey Lane, West Ham, E., chemical-manure manufacturers.

Lahey, T., Lahey, G., Edwards, G., and Seager, W. T., under the style of G. Edwards & Co., Paradise Street, Lambeth, S.E., sand and seed merchants, specialists in foods, medicines for birds, &c.

Merchant, G. A., and Mercer, J., under the style of Tamplin & Co., mineral and aerated-water manufacturers.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS.

Conisbee, Alfred, Leatherhead, veterinary surgeon.
Jago, Josiah, Sunderland, medical practitioner.

ADJUDICATION.

Wilkes, William Henry Griffin, Birmingham, surgeon.

Deed of Arrangement.

Holden, Thomas, and Holden, Jonathan, trading as Thomas Holden & Son, 53A Hammerton Street, and residing at 26 Whittam Street, Burnley, aerated-water manufacturers. Trustee, Thomas Proctor, 3 Grimsshaw Street, Burnley, chartered accountant. Dated February 4; filed February 10. Liabilities unsecured, 567*l*. 11*s*. 7*d*.; estimated net assets, 250*l*. The following are scheduled as creditors:—

	£	s.	d.
Barrett & Elers, (Limited), London	11	0	0
Dunsbee, C., Darwen	130	0	0
Holden, Miss M. E., Burnley	106	0	0
Meadowcroft, W., & Son (Limited), Blackburn ..	19	0	0
Parkinson, R., & Son, Burnley	37	0	0
Throup, J., Skipton	11	0	0
Turner, T., & Co., Dewsbury	83	0	0
Whittam, R., Burnley	11	0	0
Yond, R., Darwen	53	0	0

Bankruptcy Report.

Re **JOHN CLARK FORSTER**, Great Tower Street, City, and Osborne Street, Whitechapel, trading as Fergusson & Forster, Wholesale Spice-merchant and Liquorice-importer.

THIS debtor's examination was concluded on Thursday at the London Bankruptcy Court. He was asked to explain how a book-debt for 937*l*. due from Ed. Foster, a brother, who was made bankrupt in July, 1894, came to be treated as a good account in the balance-sheets of 1894 and 1895. The debtor explained that he was promised security that he would be ultimately paid in full.

New Companies and Company News.

YORK MINERAL WATER COMPANY (LIMITED).—Capital 10,000*l*., in 1*l*. shares, to acquire and carry on the business of mineral-water manufacturers carried on at The Royal Brewery, Brentford, and by the York Mineral Water Company at Brentford.

VITAE ORE COMPANY (LIMITED).—Capital 10,000*l*., in 1*l*. shares. Objects: To acquire the business of importing and selling a natural mineral product known as "Vitae Ore," carried on at 39 Temple Chambers, London, E.C., by Wm. T. Moore, Paul Moore, Landon C. Moore, and F. J. Hetherington, and to carry on the business of chemists and druggists. Registered without articles of association. One of the vendors, L. C. Moore, is an analytical chemist, of 31 Tunley Road, Balham, S.W.

THE EASTMAN PHOTOGRAPHIC MATERIALS COMPANY is shortly to be turned into what must be the largest photographic company in the world. It is proposed to amalgamate the existing companies in England and America with a capital of 1,600,000*l*. Mr. Geo. Eastman has lately returned to London from New York to complete the necessary negotiations. The business was founded in 1879, and since then has grown rapidly, and it is anticipated that the proposed Company will be well received by the public.

ANGLO-COLONIAL CHEMICAL COMPANY (LIMITED).—Capital 150,000*l*., in 1*l*. shares. Objects: To acquire, take over, work and deal with certain inventions for the manufacture of artificial musk and other specialties in chemical or pharmaceutical products. Among the subscribers appears the name of W. Nicholls, druggist, of 8 Barnard's Inn, E.C. The subscribers are to nominate the first directors. Qualification, 500*l*. Remuneration, 15*l*. per cent. of the net profits divided between them, after the payment of 8*l*. per cent. per annum.

W. A. BISHOP & COMPANY (LIMITED).—Capital 20,000*l*., in 10*l*. shares (1,000 5*l*. per cent. cumulative preference). Objects: To acquire and carry on the business of manufacturers of borax, boracic acid, sulphate of soda, carbonate of lime, and

other substances, and general chemical manufacturers, carried on as "W. A. Bishop & Co.," at Warrington, and at 13, Idol Lane, London, E.C., and to adopt an agreement with Wm. A. Bishop, Thomas N. Tyndale, and Arthur Pearce. The first directors are:—Wm. A. Bishop, Thomas N. Tyndale, and Ernest L. Fleming. Remuneration, as the company may decide.

SALT UNION (LIMITED).—The directors have decided to recommend a dividend of 1½ per cent. on the preference shares for the year ended December 31.

W. B. FORDHAM & SONS (LIMITED).—The directors recommend a final dividend at the rate of 12½ per cent. per annum, tax free, for the half-year ended December 31, making, with the interim dividend, 10 per cent. for the year.

WILLIAM JAMESON (LIMITED).—The prospectus of this company invites the public to purchase the business of W. Jameson, 92 Newington Butts, manufacturer of the Jameson arsenical complexion-soap and other toilet-requisites, and the vendors undertake to throw in a new secret invention, Klenzall, which they say is an ammoniated cleansing jelly. The vendor is to have 10,000*l*. in ordinary shares and 5,000*l*. in cash or preference shares for his business. The capital of the company is the above 15,000*l*., with another 5,000*l*. in 7½-per-cent. preference shares.

EXCEL MILK-STERILISING COMPANY (LIMITED).—This company is offered to the public, a subscription of 100,000*l*. being invited. The principal patent owned by the vendors was recently described in this journal. It consists substantially of a means for locking the bottles while they are in the sterilising-chamber. At present the actual business appears to be a small one (101,947 quart-bottles having been sold during 1897). The vendors ask 40,000*l*. for their property, and give an estimate of their profits based on the theory that they will sell 1,800,000 quarts in the year.

ULSTER CHEMISTS (LIMITED).—Our attention has been called to a curious inaccuracy in the prospectus issued by this company. In order to commend the shares to the public a list of the present prices of "companies of this nature" is given. This includes Boots, Harrod's Stores, Liebig's Extract, and others, Needham's (Limited) 1*l*. 6-per-cent. preference shares among the rest. Mr. Thomas Needham, chemist, Huddersfield, managing director of Needham's (Limited), is a director of the Ulster Chemists, and ought to be in a position to know the value of his company's shares. The Ulster Chemists' prospectus is dated January 19. We have before us the Huddersfield weekly share-list, published by John Haigh & Son, in which Needham's (Limited) 6-per-cent. preference shares are quoted 17*s*. to 20*s*. Which is correct.

The P.A.T.A. and the Grocers.

ON Monday evening last, a meeting, convened by the North London Committee of the Metropolitan Grocers' and Provision Dealers' Association, met at the Polytechnic, Holloway Road, N., to discuss the P.A.T.A.

The meeting was attended by about sixty gentlemen representing the grocers of North London. A few chemists were also present, and several gentlemen holding briefs for manufacturers, the following firms being represented:—Messrs. Corneille David & Co., J. Crosfield & Sons, Day & Martin, Fox & Sons, Frame Food Company (Limited), Hay's Food (Hull), R. Hyde & Co., E. & T. Pink, "Ronuk" (Limited), Stephen Smith & Co. (Limited).

The gathering was, however, essentially one of retail grocers, which fact was indicated in many little ways. One gentleman, on being introduced to another by a mutual friend, from force of habit involuntarily wiped his hand where his apron ought to have been, before grasping that of his brother trader; and the speeches made were, in some instances, punctuated by much washing of hands with "invisible soap."

What the meeting may have lacked in numbers was more than counterbalanced by the enthusiasm which prevailed; and if any complaint might be found, it lay in the fact that the unanimity was such as almost to border on the monotonous.

The chair was taken by Sir Montague Nelson, head of the firm of Nelson, Dale & Co. (Limited). Sir Montague, a middle-aged, aristocratic-looking gentleman, who wore a single eye-glass, which he dropped whenever he wished to see anything quite clearly, made an admirable Chairman. His opening address was commendably brief and to the point. When he first joined his business, he said, retailers made a profit of from 30 to 50 per cent.; but his hearers would doubtless not be so much interested in learning what large profits their forefathers made as in finding out how they themselves might secure a little of it, and he thought Mr. Glyn-Jones might be able to give them some information on that point.

Mr. Glyn-Jones, in a speech of about three-quarters of an hour's duration, laid the case, from the P.A.T.A. point of view, very plainly before his audience. He sketched the history of his Association, and told how it had successfully grappled with the "cutting" evil in his own trade, and the manner in which it was proposed to apply the same remedy to the grocery trade. Mr. Glyn-Jones is strong on anecdotes, and he emphasised his point with telling effect by many an apt illustration. Perhaps one of his best hits was that while the extreme "cutters" professed to be so philanthropic that they refused to take any profits on articles of a proprietary nature, they, nevertheless, were not above selling American hams as the best "Wiltshire," or adulterating margarine with 7 per cent. of pure butter, and selling the product as "fresh roll butter" at 9d. a pound. Anyone could make a business pay on those lines.

A resolution strongly supporting the P.A.T.A. was moved by Mr. Harry Clifford (Clifford, Hawes & Co.), and seconded by Mr. John Williams (Williams Brothers).

An animated discussion followed, and many questions were put to Mr. Glyn-Jones.

Mr. Payne urged traders not to give a window-display to any unprotected article, whatever bonus or payment was given for so doing. While this, perhaps, paid at the time, its ultimate effect was to create a sale for an article on which the trader made, in the long run, only an infinitesimal profit.

An amusing little incident happened during the discussion. It appears that Hudson's soap is out of favour with the grocery-trade, being, like sugar and some leading proprietaries, sold at, or even below, cost. When, therefore, this article being incidentally mentioned, the Chairman very naively asked, "Is Hudson's soap cut?" the query was met with roars of laughter. The motion was unanimously carried. Mr. Lewis proposed the second resolution, as follows:—

That this meeting is of opinion that retailers of proprietary articles should refuse to exhibit showcards or to distribute hand-bills relating to any proprietary on which a living profit is not guaranteed.

Mr. Appleton seconded the resolution, which, after a short discussion, was also carried without a single dissenter.

Sir Montague Nelson, in responding to a vote of thanks, stated that he was glad to have been there that evening, because he had, as a manufacturer, been greatly interested and instructed by what he had heard. He felt sure that if manufacturers came more in contact with retailers it would be greatly to the advantage of both parties. In his business career once only had he cut off the supplies of a client of this, and in that case it was a wholesale firm. He felt fully justified in the course he had then pursued, because that firm had injured his interests by what they had done. Manufacturers, he thought, had a perfect right to impose conditions and restrictions upon the sale of their goods, and, if the goods were accepted on those conditions, to see that they were rigidly carried out.

As a result of the meeting, the major portion of the audience became enrolled on the membership of the P.A.T.A. Grocery Section, which we understand is now to be rapidly pushed on.

A EUROPEAN doctor in Nubia, who treated the natives for various ailments free of charge, was, after a few weeks, besieged by his patients, who demanded money "Money!" said the astonished doctor, "What for?" "Because," answered the natives, "we have been taking your physic for so many days."

Westminster Wisdom.

THE PARIS EXHIBITION, 1900.

In reply to a question by Sir Howard Vincent, Mr. Curzon told the House of Commons on Monday that the Government proposed to ask Parliament for a grant of 75,000*l.* to provide for the expenses connected with the British Section. The German Government, he stated, has sanctioned a grant-in-aid of 5,000,000*m.*, or about 250,000*l.* The United States Government has made a Treasury estimate of \$350,000, or about 70,000*l.* In Italy nothing has yet been officially settled as to the exact amount to be devoted to this purpose. Sir H. Vincent gave notice that he would call attention to the subject on a future occasion.

THE COMPANIES BILL

was formally read a second time in the House of Lords on Monday in order that it might again be referred to a Select Committee. The Committee which considered it lately had not been able to complete its work (said the Earl of Dudley), owing to the mass of evidence brought forward.

Mr. Faithfull Begg's Bill to amend the Companies Acts is supported by Sir John Lubbock, Mr. Gordon, Mr. Hedderwick, and Mr. Harry Marks. It is down for second reading on May 4.

THE MIDWIVES REGISTRATION BILL.

Mr. J. B. Balfour got the eighth place in the ballot for precedence for his Bill for the Registration of Midwives. Mr. A. de Tatton Egerton, Mr. Schwann, Mr. Heywood Johnstone, Mr. Hazell, Mr. Cosmo Bonsor, Mr. Tennant, and Mr. Skewes Cox are also sponsors for the measure.

• The object of this measure, which is one of the Bills likely to be heard of during the Session, is to enable the public, and especially the poor, to distinguish between midwives who have been trained and have given evidence of competence, and those who have not. The Bill provides for a midwives' register, and restricts the description "midwife" to persons on the register. Persons who, at the time of the passing of the Bill, have been in *bona-fide* practice as midwives for a specified number of years, are to be admitted to the register, but all others must go through a course of training and pass an examination. There are at present voluntary bodies who give certificates, but it is now proposed to create a Board under State control. It is further proposed to regulate and supervise the practice of midwives under rules to be approved by the General Medical Council.

EARLY CLOSING BILLS.

Sir John Lubbock's Bill for the earlier closing of shops and Sir C. Dilke's Bill "to amend the law relating to shops" are put down for second reading on Tuesday next, February 22.

FIRST READINGS.

Among the multitude of Bills introduced into the House of Commons may be named the following:—

- Registration of Midwives (J. B. Balfour).
- To Abolish Dealers' or Grocers' Certificates in Scotland (Sir J. Leng).
- To Make More Effectual Provision for Prevention of the Pollution of Rivers and Streams (Sir F. Powell).
- To Amend the Merchandise Marks Act (C. McArthur).
- To Amend the Merchandise Marks Act (Sir H. Vincent)
- To Amend the Companies Acts (F. Begg).
- To Amend the Law Relating to Weights and Measures (Mr. Bousfield).
- To Provide for the Earlier Closing of Shops (Sir J. Lubbock).
- To Amend the Law Relating to Shops (Sir C. Dilke)
- Registration of Firms (Sir S. Northcote).

A Bill was introduced on Wednesday by Mr. Wootton Isaacson, member for the Tower Hamlets, to amend the law relating to patent and proprietary chemical compounds. In the introduction of this Bill Mr. Isaacson's supporters are Major Rasch, Mr. Owen, Mr. Howard, Sir Edward Gourley, Mr. Joseph Richardson, and Mr. Ambrose.

Trade Notes.

MESSRS. PHILIP JOSEPHS & SON, shopfitters, Old Street, E.C., will close their premises on Wednesday next, February 23.

MESSRS. EVANS, LESCHER & WEBB, of 60 Bartholomew Close, E.C., inform us that they have received the gold medals awarded at the Brisbane Exhibition for their Montserrat lime fruit-juice, and Montserrat lime fruit-sauce.

MESSRS. PARKE, DAVIS & CO., 21 North Audley Street, W., have sent us a copy of their new price-list for 1898. It is a book of 240 pages, of a very convenient size, and is made easy for reference by having the general contents of the pages noted on the margins in heavy type.

MESSRS. BOTWRIGHT & GREY, opticians, 13 Spencer Street, Clerkenwell, E.C., have purchased a fine collection of microscopic objects made by the late Mr. Thorples. It comprises about 200 diatom slides by Marshall, medical, solar, and opaque objects, and the cabinets. It can be seen at the above address.

A NEW half-yearly edition of Southalls' "Export Journal" and prices-current has just been issued in an attractive lithographed cover. It contains some 200 pages, and gives a drug price-list, an illustrated list of druggists' and surgeons' sundries, illustrations of shop-fittings, and descriptions with engravings of the many attractive specialities put up by the house.

WE have received from Messrs. Jules Denoual & Co., of Carlton Works, New Cross Road, S.E., a sample box of their Vine Floral Cachous. These have a pleasant flavour, and perfume the breath strongly. They are put up in small aluminium-painted metal boxes suitable for the pocket. To advertise them samples are being sent to ladies at most of the fashionable dances in town and country.

MESSRS. ROUSE BROTHERS, of 61 Charlotte Street, London, W., are sending out to chemists, and will send to any who have not had one, a neatly-printed card giving "Fifty don'ts" for hanging up in the shop. The "Don'ts" contain good advice, though to a perfect pharmacist they are not necessary. If, however, Messrs. Rouse please all the pharmacists who are not perfect, they will have a sufficient group of friends. The fiftieth "Don't" is the only one which shows their hand.

THE half-yearly price-current issued by Messrs. Evans Sons & Co., Liverpool, and Evans, Lescher & Webb, London, has just reached us. It shows how fully these houses lay themselves out to meet the requirements of chemists and druggists. The list covers not only drugs, chemicals, and pharmaceutical preparations, but also druggists' sundries, surgical-appliances, proprietaries, and shop-fittings. Very full illustrated descriptions are also given of the various specialities of the firms, including Hawley's Counter-adjuncts, on which we have several times commented.

AN OXINE SHOW is now open in Winchester House, Old Broad Street, E.C., where oxine in all its forms is exhibited. The gentleman in charge courteously took our representative round the place and emphasised the fact that oxine is prepared from English beef and English vegetables only. It is a jelly put up in 2-oz., 4-oz., 8-oz. and 16-oz. wide-mouthed glass jars. It is also put up in tablets in nicely finished boxes, and their sustaining properties are insisted on. For export the company have their preparation in $\frac{1}{2}$ -lb. and 1-lb. airtight skins. They have shipped a large quantity in this form to Klondyke and Sierra Nevada, and they supplied the Jackson-Harmsworth Expedition with it. The present exhibition will serve to bring the article especially under the observation of financiers, who are located all around the district, as it is intended to form the business into a limited liability company in the course of a few weeks.

Business Changes.

MESSRS. GOLDTHORPE & COOK, chemists and druggists have opened a business at 68 High Street, Chatham (Kent).

MR. R. G. EDWARDS has disposed of his business at 66 High Street, Rhyl, North Wales, to Mr. Percy J. Ashfield, late of Crewe. Messrs. Berdoo & Co. effected the sale.

MR. J. REED, of Holsworthy, has purchased, through the agency of Messrs. Berdoo & Co., the business lately carried on by Mr. G. Breeze at 36 Catherine Street, Devonport.

MESSRS. BOOTS (LIMITED), cash chemists, have opened a second branch in Warrington, at Market Gate. A new branch has also been opened at 28 High Town, Hereford.

MESSRS. BREEZE & CO. have removed their Baking and Egg-powder Works from Devonport to more commodious and centrally-situated premises at Station Road, Union Street, Plymouth.

MR. A. ASHFIELD, of King's Road, Reading, has disposed of his business to Mr. W. H. Mallaband, of Plymouth. The transfer was effected by Messrs. Berdoo & Co. [Corrected announcement.]

MR. H. B. FOULSHAM, of Stradbroke, Suffolk, has disposed of his business, through the agency of Messrs. Berdoo & Co., to Mr. J. N. Corbyn, for many years with Ascough, Thompson & Co.

MR. A. J. B. WILLIAMS, Bognor, has purchased the business carried on for the last seven years by Mr. S. W. Woolley, pharmaceutical chemist, at the Whitehall Park Pharmacy, Dresden Road, Hornsey Lane, N.

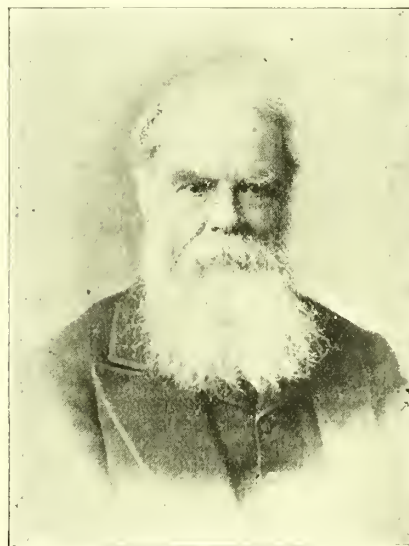
Deaths.

BENNETT.—On January 24, Mr. Samuel Bennett, chemist and druggist, Tunstall. Aged 60.

EDISBURY.—On February 8, Mr. Henry Edisbury, chemist and druggist, Whitfield Road, Everton. Aged 70.

GARNER.—The death is reported of Mr. John C. Garner, of Garner & Son, the well-known druggists in De Kalb, India. He was born in England in 1832, and went to the United States when he was 23.

GLAISYER.—We annex a portrait of the late Mr. Thomas Glaisyer, of Brighton, who, as stated in our last week's issued died on February 4 in his 91th year. One of the dates given in our note last week need to be corrected. Mr. Glaisyer was



born in 1809, and it was in 1823, at the age of 14, that he left school and immediately took his place behind the counter. He was treasurer of the Brighton Auxiliary of the Bible Society for about fifty years, not sixty as was stated in the local papers.

PEPPER.—On February 8, at Eaton Lodge, St. John's Road, East Putney, Mary Ann, widow of the late John Pepper (chemist, and manufacturer of medicines, Tottenham Court Road), in her 70th year.

Festivities and Entertainments.

EXETER CHEMISTS DINE.

The annual dinner of this Association was held on February 9, under the presidency of Mr. D. Reid. Among those present were Mr. J. D. Harris (Sheriff of Exeter), Rev. E. Read, Messrs. J. Hinton Lake, T. Linscott, J. F. Rowsell, T. C. Milton, H. W. Gadd, E. F. Stone, E. Lemmon, H. W. Dalgleish (Townsend & Co.), H. J. Dalgleish (Ford & Shapland). After the dinner a toast-list was gone through, the President proposing "The Queen," and Mr. T. C. Milton "The Army and Navy." The President then proposed "The Exeter and District Chemists' Association," and thanked the members for the honour they had done him in electing him their President, and said the principal object of their associating together was that they could rapidly assemble to discuss any new points which arose in the evolution of their calling. Continuing, he said among the changes contemplated was the introduction of a new Pharmacy Bill, in furthering the objects of which they had taken care to wait on their member (Sir Stafford Northcote) and explain the Bill to him. The main object of the Bill was consolidation, and to introduce a more highly educated class of men into their ranks by increasing the stringency of the First examination. The Pharmaceutical Council were working forward to a compulsory curriculum. The speaker alluded to their local pharmacy school, which was proving very useful to some of their members. Mr. Rowsell, in responding, pointed out that associations like theirs were the lineal descendants of the ancient trade-guilds, and had some objects in common with them. Mr. J. Hinton Lake proposed "The Medical Profession," and pointed out how chemists could much assist medical men in preparing the many new substances required in modern treatment of diseases. The Sheriff of Exeter (senior surgeon of the Devon and Exeter Hospital), in responding, likened their Association to the British Medical Association, which looked after the medical profession. Mr. Lemmon then submitted "The Visitors," and said the public treated medical men and chemists much alike, expecting a good deal in return for small payments. The Rev. E. Read replied, and, after the toast of "The Press," a successful evening was brought to a close by the singing of "Auld Lang Syne."

THE SMOKE OF THE MIDLANDS.

The members of the Midland Chemists' Assistants' Association held another of their pleasant "smokers" at the Exchange Restaurant, Birmingham, on February 9. The chair was occupied by Mr. J. Wakefield, who urged the advantages of organisation both from a trade and social point of view. A musical programme of varied and considerable merit was sustained by Messrs. Thornton, T. H. Thomas, Lawson, F. Jones, F. Casson, and E. Osborne.

A DANCE IN SHEFFIELD.

The Sheffield Pharmaceutical and Chemical Society's ball, which is a new departure taken this year with a view of increasing the popularity of the Society, took place at the Masonic Hall on February 10, and proved such a success that there is small doubt but that it will become an annual feature. Mr. A. R. Fox was M.C., in which duties he was supported by Messrs. G. Squire, G. T. W. Newsholme, C. F. Carr, H. Autcliffe, and J. B. Pater as stewards. The guests included several medical men.

BLOOMSBURY BUOYANT.

The annual dinner of the School of Pharmacy took place on February 16, in the Caledonian Salon, Holborn Restaurant, Professor Greenish in the chair. The company numbered about ninety, and included the President of the Pharmaceutical Society (Mr. Walter Hills), Mr. M. Carteighe, Dr. Attfield, Mr. Martindale, and Mr. C. B. Allen. After dinner the Chairman proposed the toast of "The Queen," which was drunk with musical honours. Mr. M. Carteighe then proposed "The School of Pharmacy," and mentioned that their school was modelled originally on the plan of the French School of Pharmacy, and urged pharmacists to raise the standard of education before the Board

School boy, under the influence of technical education, reached their present one. Professor Greenish replied, and said the school was never so full as at present; they had had to refuse applications for benches this session, for the first time on record. Mr. H. Payne, in proposing "The Pharmaceutical Society," in conjunction with Mr. H. E. Matthews, said that, in reference to the new Pharmacy Bill, they were not all agreed as to its value; but his opinion was that honest criticism was far better than the apathy which had been characteristic of pharmacists in the past. Mr. Walter Hills replied to this toast, and pointed out that he was not the parent of the new Bill; it was the joint production of the Council members. He had been busy in the Lobby of the House of Commons the last few days, and he hoped the Bill would pass, in spite of an adverse vote which he was told had been given by the School of Pharmacy Association. A musical programme was contributed by present and past students, including Mr. Carteighe.

New Books.

Any book named in this list can be supplied post-free to any part of the world on receipt of the published price by the Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

Anders, J. M. *Text-book of the Practice of Medicine.* Illus. 2 vols. Roy. 8vo. Pp. 1290. 36s. (Rebman.)

Aveling, E. *Introduction to Study of Botany for Candidates for London Matr. Ex., Science and Art Depart. Ex.* 271 Illus. and Glossary. 2nd ed. Cr. 8vo. Pp. 368. 4s. 6d. (Sonnenschein.)

Calendar of the Pharmaceutical Society of Great Britain, 1898. Pp. 520. 2s.

Clarke, J. H. *Indigestion: Its Causes and Cure.* 5th ed. enl. Fcp. 8vo. Pp. 144. 1s. (Epps.)

Curtis, C. C. *Text-book of General Botany.* Royal 8vo. 87 Illust. 12s. net. (Longmans.)

Dana, C. L. *Text-book of Nervous Diseases: Compendium for Students and Practitioners.* 4th ed. 8vo. 20s. (Churchill.)

Fearn, J. E. *Modern Photography for Amateurs.* 3rd ed. Cr. 8vo. Pp. 128. Sewed. 1s. (L. U. Gill.)

Garrett, F. C., and Harden, A. *Elementary Course of Practical Organic Chemistry.* Cr. 8vo. Pp. 80. 2s. (Longmans.)

Groom, P. *Elementary Botany.* 275 Illus. Cr. 8vo. Pp. 264. 3s. 6d. (Bell.)

Henderson, J. *Practical Electricity and Magnetism.* Cr. 8vo. Pp. 404. 6s. 6d. (Physical and Electrical Engineering Laboratory Manuals.) (Longmans.)

Landolt, E.; Gyagax, P. *Vade Mecum of Ophthalmological Therapeutics.* Trans. by E. Neyman. 12mo. 3s. 6d. (Lippincott.)

Maclean, H. *Popular Photographic Printing Processes.* Diagrams, sketches, photographs, frontispiece. Cr. 8vo. Pp. 174. 2s. 6d. (L. U. Gill.)

Parkinson, J. P. *The Diagnosis of Disease.* Cr. 8vo. Pp. 178. 4s. (Baillière.)

Retrospect of Medicine: Half-yearly Journal. Ed. by James Braithwaite, assisted by E. F. Trevelyan. Vol. 116. 12mo. Pp. 456. 6s. 6d. (Simpkin.)

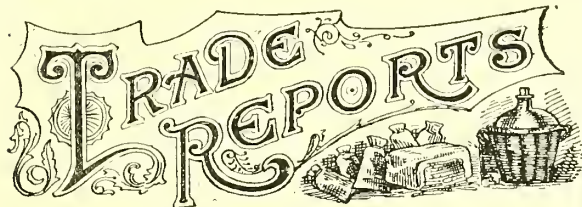
Roechling, H. A. *Sewer-gas and Its Influence upon Health.* 8vo. Pp. 240. 5s. (Biggs.)

Smith, J. H. *Elementary Treatise on the Metric System of Weights and Measures.* Cr. 8vo. 2s. (Longmans.)

Tappeiner, H. *Introduction to Chemical Methods in Clinical Diagnosis.* Trans. from the German by J. McWeeney. 12mo. 3s. 6d. (Longmans.)

Vaccination. Appendix IX. to Final Report of Commission; Papers relating to cases in which death or non-fatal injury was alleged or suggested to have been caused by, or otherwise connected with, vaccination. Folio. 3s. 8d. Report to the Local Government Board on the Preparation and Storage of Glycerinated Calf Vaccine Lymph. Intro. by Medical Officer. Plates. 8vo. 1s. (Eyre & S.)

Van't Hoff, J. H. *The Arrangement of Atoms in Space.* 2nd ed., with an appendix, "Stereochemistry among Inorganic Substances." By Professor A. Werner. Transl. and edited by Arnold Eiloart. Cr. 8vo. (Longmans.)



Notice to Retail Buyers.

It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk.

In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable even for manufacturing purposes.

Further points which should be borne in mind are that the distributor generally has to bear the bulk of the freight-charges on the goods on their way from the producer to the retailer, and that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., February 17.

THE speculators are the busiest people in Mincing Lane just now. They began three weeks ago with cloves, then took to chillies, and this week they have had a try at ginger, on the ground that there are poor crops, but we have good advice that the Jamaica crop is to be very good this year. The drug and chemical markets are dull in London, but from the North we hear better accounts. The following are the principal changes of the week:—

Higher.	Higher—cont.
Cardamoms	Shellac
Cassia lignea	Sulphonal
Chillies	Wax (Bees')
Citric acid	
Copper sulphate	Lower.
Eserine sulphate	Ammonia sulphate
Ginger	Antipyrin
Liquorice juice	Cloves
Oil of bergamot	Manna
Oil of lemon	Naphthas
Pilocarpine	Pimento
Quicksilver	Sugar of milk
Saffron	

We deal with to-day's drug-auctions later. The cinchona-sales in London this week were dull and unchanged.

CABLEGRAMS.

OUR HAMBURG CORRESPONDENT cables this afternoon that castor-oil has become firmer; on the other hand, kola-nuts are quieter at 38m. per 100 kilos. To-day's quotation for camphor is 240m. per 100 kilos.

OUR BERGEN CORRESPONDENT sends us a despatch at 11.30 A.M. to-day in the following terms:—"The fishing is almost a failure. The latest accounts are that owing to continual storm the catch up to the present is equivalent to 333 barrels against 2,685 last year, the catch so far being only 700,000 against 3,600,000 fish last year. The market is firmer, and the f.o.b. price is 65s. per barrel [make not stated]."

OUR NEW YORK CORRESPONDENT sends us the following cablegram this afternoon:—"Opium advancing, and \$2 90 is asked. Wormseed oil and wormwood are both scarce, and have gone higher. Prime yellow beeswax sells at 28c. per lb.; balsam of tolu is weak at 40c., and gum chicle is advancing, the price now being 30c. Refined cotton-seed oil has also advanced to 23½c. per gal."

ACETANILIDE is dearer, the prices ranging from 1s. 1d. to 1s. 1½d. per lb., according to quantity.

ACID, CITRIC.—The easier tendency of last week has been counteracted by the increased value of juice and citrate of lime. It is not possible to buy English crystals lower than 1s. 0¾d. to 1s. 1d. per lb. on the spot. Makers are not inclined to sell.

ACID, TARTARIC.—English crystals are offered on the spot at 1s. 1d. per lb., and is firm at that. Foreign is quoted at 1s. 0¾d. to 1s. 0½d. per lb.

ANALGESINE (or Phenazone), the chemical equivalent of antipyrin, is offered at 17s. 6d. per lb. in quantities of not less than 100 lbs. This is French make; the German phenazone is 15s. 6d.

ANISEED (CHINESE STAR).—Supplies in China have risen to 500 piculs, but the greater part of this stock is held out of the market, and prices have been advanced.

ANTIPYRIN.—While the patent has expired it should be noted that the title of this product is registered as a trademark held by the original patentees, whose quotation is 2s. 1½d. per oz for wholesale quantities.

ARSENIC.—Very quiet. Best white powder is offered at 22½s. per ton on the spot.

CAMPHOR, CRUDE.—Chinese advices, dated January 13, report a lower tendency. The arrivals at Hong-Kong since December 30 to the above date were 1,725 cases; sales, 600 cases; and stock, 7,000 cases. No shipments were made to Europe, but 384 cases were shipped to India during the above period. Sellers in London offer Chinese at 86s. per cwt. (buyers, 84s.) and Japanese at 94s. (buyers, 93s.), in each case "c.i.f." It is a quiet market.

CASSIA LIGNEA dearer, at 51s. to 51s. 6d. per cwt.

CINCHONA.—At the Amsterdam auctions to be held on February 24, 6,547 bales of Java cinchona will be offered (as announced last week), weighing together 583,612 kilos. This quantity represents a content of sulphate of quinine of about 28,947 kilos. (1,020,874 oz.), of which 849 kilos, are contained in druggists' and 28,098 kilos, in manufacturing-bark, the average quinine-content of the latter being 5.14 per cent.

The total exports from Ceylon from January 1 to 25 were 66,101 lbs., against 16,278 lbs. in 1897. Of this quantity 35,929 lbs. were shipped to the U.K. and 29,448 to the United States.

The monthly cinchona-auctions held in London on Tuesday were again moderate as regards quality, the eight catalogues comprising 2,134 packages, divided as follows:—

	Packages.	Packages.
East Indian cinchona...	955	of which 506 were sold.
South American cinchona	673	" 18 "
African cinchona ...	177	" 170 "
Ceylon cinchona ...	171	" 63 "
Java cinchona...	158	" 139 "
	2,134	896

The tone throughout the auctions was depressing, and slightly easier rates were accepted. There was so little competition that several holders preferred to buy in the bulk of their supplies. The average unit obtained was 1½d. to 1¼d. The following figures represent the approximate quantities of bark purchased by the principal buyers:—

	Lbs.
Agents for the American and Italian factories ...	104,385
Messrs. Howards & Sons ...	31,425
Agents for the Brunswick factory...	22,537
Agents for the Paris factory ...	16,016
Agents for the Imperial Quinine factory ...	14,239
Agents for the Auerbach factory ...	1,200
Agents for the Mannheim and Amsterdam factories ...	nil.
Agents for the Frankfurt and Stuttgart works ...	nil.

Total quantity sold ... 189,802
Bought in or withdrawn ... 227,497

Total quantity of bark offered ... 417,299

The following prices were realised:—*African*: Fair to good red quilly, 5½d. to 6¼d. per lb.; red quilly chips, 4¾d. to 5¾d. per lb. *South American*: Bolivian calisaya was mostly

bought in; 164 packages *Chuprea* were also taken out. *Java*: Good *Ledgeriana* stem-chips and branch, 6*d.* to 7½*d.* per lb. *Ceylon*: *Succiruhra* stem-chips and shavings, ordinary to good, 3*d.* to 3½*d.*; renewed ditto, 3½*d.* to 3¾*d.* *Officinalis*, renewed chips and shavings, 4½*d.* to 4¾*d.* per lb. *East Indian*: Crown, renewed chips and shavings, 3*d.* to 3½*d.*; original ditto, 2½*d.* to 2¾*d.* *Ledgeriana*, good natural broken quill and chips, 6*d.*; natural shavings, 2½*d.* to 2¾*d.*; chips, 4*d.* to 4¾*d.* per lb. At the drug-auctions there was little demand. For bold bright, flat *Cartagena* bark 5½*d.* per lb. is asked. *Guayaquil* was bought in at 9*d.*, and for flat bright yellow bark 1*s.* 1*d.* was refused. A parcel of 42 packages *Peruvian* bark sold well at from 7*d.* to 10½*d.* per lb. An arrival of 1,007 bales is reported from Calicut per *Clan Mackinnon*.

CLOVES.—Zanzibars exhibited a drooping tendency at the beginning of the week, and prices declined ¼*d.* per lb., but on good buying a firmer tone was apparent, and a portion of the loss was recovered.

COCAINE.—Messrs. Merck's agent informs us that he temporarily lowered the price of hydrochlorate last week to meet a reduction by two other manufacturers. We hear that there are still offers below 10*s.* per oz.

COCOA-BUTTER.—Our Amsterdam correspondent states that at the next auctions to be held on March 1, 70 tons of *Van Houten's* make, 15 tons *Helm*, 5 tons *Hamer*, 5 tons *Hollandsche*, 2 tons *Mignon*, and 7 tons foreign marks.

ESERINE (PHYSOSTIGMINE) SULPHATE has been advanced to 1*s.* 6*d.* per gramme in 15-gramme lots; tubes extra.

ETHER.—It is reported from Germany that the price of ether has been advanced slightly (1¼*m.* per 100 kilos.).

GALANGAL.—The stock in China is estimated at about 200 piculs, a large part of which, however, is not fit for export.

GINGER.—The market for Japanese is excited, mainly owing to the fact that the crop is only a third of the average. The speculative buying of *Cochin* noted in our last issue continued during the week, and a very large business has been done, a considerable advance in price being established. Offers of washed rough from the other side are much above what second-hand sellers are willing to accept. At Wednesday's auction ordinary small washed rough realised 27*s.* to 29*s.* per cwt.; and good bold 32*s.* per cwt.; dull small native cut, 34*s.* 6*d.* to 37*s.*; and small and medium ditto, 39*s.* 6*d.* to 40*s.* per cwt. *Jamaican* mostly sold at 57*s.* to 66*s.* for common; and at 83*s.* to 88*s.* per cwt. for dull washed. *Japan* sold at the highest prices recently touched—viz., 19*s.* to 20*s.* for mouldy to fair smooth. A sale is reported at 18*s.* 9*d.* per cwt., c.i.f. terms, for new crop, but 19*s.* 6*d.* to 20*s.* are the prices now asked.

GLYCERINE is steady at 50*s.* to 51*s.* per cwt. for double-distilled sp. gr. 1.260, according to brand.

LIQUORICE JUICE has been advanced 2*s.* 6*d.* to 3*s.* per cwt. in consequence of manufacturers in Sicily being unable to cope with the demand, and it is said that orders are being refused. The current quotation for good Sicilian brands is from 64*s.* to 65*s.* per cwt., "c.i.f.," and *Leghorn*, 55*s.* "c.i.f."

MANNA.—Prices from Messina are lower all round. Flake is offered at 1*s.* 11*d.* per lb. in 20-lb. boxes "f.o.b.," usual boxes 1*s.* 6*d.*; superfine 9*d.*; and sorts 6½*d.* per lb.

OIL, BERGAMOT has increased in value, 3*s.* 6*d.* per lb. being to-day's quotation.

OIL, CASSIA, is firmer. Wednesday's cables from Shanghai gave the following quotations:—70 to 75 per cent. cinnamic aldehyde 4*s.* 9*d.* per lb., and 75 to 80 per cent. 4*s.* 10½*d.*, both "c.i.f." terms February-March shipment. This confirms our Hong-Kong advices of January 13, when 80 to 85 per cent. oil was scarce and in demand, while lower grades were offering in but small quantities. The stock there is 100 piculs.

OIL, CITRONELLA.—Ceylon exports for January 1 to 25 were 81,960 lbs., of which 76,949 lbs. went to America, nothing being shipped to London.

OIL, CLOVES.—Unchanged. American distilled oil is offered at 2*s.* 6*d.* per lb.

OIL, COD-LIVER.—The market is in a peculiar position, owing to the lateness of the season and the absence of samples of new oil. New oil has been offered and sold in London this week at the spot price of 65*s.* per barrel, and 60*s.* is still quoted for another brand of new oil on the spot, but quotations for best qualities are 70*s.*, 75*s.*, and 77*s.* 6*d.*,—the last the finest Lofoten oil. Our Bergen correspondent writing on February 14, states that the fishing is still delayed by the stormy weather, and there is nothing of importance to add regarding the catch since our last advices.

OIL, LEMON.—Higher in consequence of the Messina advices to hold firm. The crop so far has been small, and higher prices than to-day's c.i.f. quotations (4*s.* to 4*s.* 10*d.* per lb.) are confidently expected.

OIL, LEMONGRASS.—The quotation for good oil is 5*d.* per oz. The *Clan Mackinnon* from Cochin has brought 414 packages.

OIL, PEPPERMINT.—Business has been done in "J. B. Horner" (an American distiller) brand at 3*s.* 3*d.* per lb. HGH is unchanged at 5*s.* 6*d.*, but this may be shaded.

OIL, STAR-ANISE, is quiet at 7*s.* 3*d.* per lb. on the spot. The China market is tending upwards, and stocks at Hong-Kong on January 13 were estimated at 60 to 80 piculs.

OPIMUM.—The London market is quiet but firm, owing to Turkey advices to hold. There are no buyers. Our reports from Constantinople and Smyrna are printed on page 326.

PEPPER steady, without material change.

PILOCARPINE.—One maker has advanced his price to 1*s.* 3*d.* per gramme, or 28*s.* per oz., and less for quantity.

PIMENTO is easier, at 4½*d.* per lb.

QUICKSILVER.—Messrs. Rothschild raised the price on Monday to 7*l.* 2*s.* 6*d.* per bottle; second-hand holders quote 6*d.* less. No change in mercurial salts. The previous rise in quicksilver is attributed in New York to a decrease in the American production during 1897, California having made about 25,100 flasks, against 30,765 flasks in 1896. The consumption has also increased, particularly in connection with electrolytic chemical processes, which more than counterbalances the decrease in the demand for the extraction of silver. The Russian production is increasing, but none is exported, home consumption absorbing the entire output. The American production is in the hands of an agency.

QUININE.—There is no business to report this week, and the quotations for good German brands remain unchanged at 1*s.* 0½*d.* per oz. nominally. At auction a parcel of 7,000 oz. German was bought in at 1*s.* 1*d.*, a bid of 11½*d.* being refused.

SAFFRON.—All qualities of Valencia have been advanced 1*s.* 6*d.* per lb., 38*s.* being the spot-quotation for the best. The advance is due to low stocks.

SEEDS.—*Anise* dearer, but not much business to report *Canary-seed*: A good speculative inquiry, and fair sales at 25*s.* to 25*s.* 6*d.* per quarter for Turkish; and at 26*s.* for Barbary.

SHELLAC.—The business done privately since our last report is unimportant. At the auctions on Tuesday the small supply of 521 cases was offered, of which about half sold, with fair competition, at an advance of about 1*s.* per cwt., making standard TN now 67*s.* *Button* and *Garnet* were slow of sale. Fair to flat, curly, reddish, second orange realised 66*s.* to 67*s.*; medium weak flat, red, 64*s.* to 65*s.*; low red livery, in block, 60*s.* per cwt. For March-April delivery, TN is quoted at 68*s.* per cwt.

SUGAR OF MILK has been reduced to 57*s.* 6*d.* per cwt. for best powder, and 50*s.* for seconds. The American make is now largely imported into this country, and although the stock in London is not heavy, the production in the United States is increasing every year. The duty of 5*c.* per lb. has enabled American makers to keep the German and Swedish make out of the United States, and the over-production goes to Japan, Hamburg, and London.

SULPHONAL has been advanced by one agent to 8*s.* per lb. on account of scarcity, but it is just possible to buy at 7*s.* 6*d.*

DRUG-AUCTIONS IN LONDON.

THE sales held to-day were poor in every respect, as may be judged from the following table of the goods offered:—

	Offered	Sold		Offered	Sold
Aconite	12	0	Jalap	29	0
Aloes	232	57	Kamala	4	0
Ambergris.....	6	1	Kino	4	0
Ammoniacum	3	0	Kola	102	2
Aniseed	10	0	Liquorice-root	7	0
star	23	0	Musk.....	17	1
Annatto seed	4	0	Myrrh	47	0
Antimony.....	4	0	Oil, bay	2	0
Argol	20	4	castor.....	189	14
Asafetida.....	118	0	cedar-wood	5	0
Balsam Peru	5	0	cinnamon	19	0
Tolu	10	0	citronella	5	0
Benzoin.....	280	82	cloves.....	10	0
Buchu	16	5	eucalyptus	22	0
Calumba.....	16	0	gingergrass	8	0
Cannabis indica	20	0	lemon.....	3	0
Cardamoms	213	116	limes.....	9	9
Cascara sagrada	42	0	neroli	2	0
Cascarilla	8	0	wintergreen	1	0
Chirata	8	0	Orange-peel	91	6
Cinchona	132	42	Orris	80	50
Civet (horns)	4	0	Pistachio-nuts	4	0
Coca-leaves	75	0	Quillaia	5	0
Colocyath	34	0	Quinine sulph.	5	0
Cubebs	255	10	Quince-seeds.....	5	5
Cumin-seed	125	30	Rhubarb	136	19
Cuttle-fish.....	186	5	Sarsaparilla	35	0
Dill-seed	2	0	Scammony root	50	0
Dragon's blood	2	2	Senega	12	0
Ergot of rye.....	37	0	Senna.....	75	25
Fennel-seed	28	8	Simaruba bark	2	0
Galls	213	0	Strophanthus seeds	5	0
Gamboge	38	5	Squill.....	24	20
Gentian	30	5	St. Ignatius beans	20	0
Golden-seal root	7	0	Tamarinds	20	0
Guarana	2	0	Tonka beans	29	15
Guaiaicum.....	9	0	Tragacanth	7	3
Gum acacia	10	0	Turnerie.....	8	8
Honey	141	8	Vanilla	197	118
Ipecacuanha.....	63	3	Wax, bees'.....	279	98

It should, of course, be understood that some drugs offered in auction frequently change hands immediately, or soon after the sale. The figures in the above table refer to packages.

ALOES.—Of Curaçao 150 packages offered, of which 50 sold at 25s. to 32s. per cwt., according to quality. Dark and partly burnt is limited at 17s. 6d., a bid of 15s. being refused. Sixty-three kegs Socotrine were offered, but nothing sold. Good quality in kegs is held for 90s. Of the Cape variety 16 packages were offered and 4 sold. Good hard bright at 23s. per cwt., and ditto, part softish, at 19s. Three cases of Zanzibar in skins sold at 82s. 6d. for good lively bright.

AMBERGRIS.—Five tins of black, heavy, undeveloped quality were taken out without mention of price. One tin offered, of low quality, sold "without reserve" at 16s. per oz.

ANISE (CHINESE STAR).—Nothing doing. Price, 105s. per cwt., c.i.f. In auction 23 bags were limited at this price, but no bid was made.

ARGOL.—Four bags common powdery Cape sold at 28s. per cwt.

ASAFETIDA.—Buyers have been holding off in expectation of further arrivals, but it is stated that no more is likely to come from Bombay, and little from the Persian Gulf this season. In auction 118 cases were offered, but nothing sold, the limits being above buyers' ideas. The prices are 35s. for dry stoney, 47s. 6d. for medium, and 85s. for pearly drop.

BENZOIN.—Siam of fine quality is still very scarce and much wanted. A parcel of this grade was withdrawn before the sale, at 5l. per cwt. above the price at which the same parcel was withdrawn a fortnight ago. A bid of

17l. 2s. 6d. was refused for Siam of medium to bold loose almonds, 20l. being required; ditto, part blocky and smaller almonds are held for 16l. per cwt., 14l. 10s. being refused. Small siftings in block sold at 6l. 12s. 6d. Two cases of blocky sold "without reserve" at 80s. All the Palembang gum offered was bought in at 25s. per cwt. No Penang gum was sold, the limits being 52s. 6d. to 90s. per cwt., according to quality. Sumatra sold with fair competition at 9l. to 9l. 2s. 6d. for good seconds, medium to bold almonds, very slightly false-packed; other prices paid were from 5l. 10s. to 7l. according to quality; fair seconds, small to medium almonds, realised 85s. to 91s. per cwt.

BUCHU.—Small round bright green leaf sold at 4¼d. per lb., and stalky at 4d. The *Pembroke Castle* from Cape Town has brought 14 bales.

CALUMBA.—So far no root has come forward, and holders maintain their prices. In auction to-day the 16 cases offered were bought in at high prices; 70s. per cwt. being asked for dull washed.

CARDAMOMS sold well, and about 1d. dearer. Fine bold white Ceylon-Mysore realised 4s.; medium to fair bold white, 3s. 9d.; ditto, rather brownish, 3s. 5d.; medium to fair bold white, 3s. 1d.; bold brownish, 2s. 8d. to 2s. 10d.; medium to bold dark, 2s. 4d. to 2s. 6d.; part split, 2s.; medium soft to fair dark, 2s. 2d. to 2s. 3d. per lb. Good long Ceylon were bought in at 3s. 3d. per lb. Seeds sold at 3s. to 3s. 3d. per lb., according to quality. Fifty packages arrived per *Orotava* from Colombo. The exports from Ceylon from January 1 to 25 amounted to 15,402 lbs., of which 4,230 lbs. were shipped to the U.K., 9,267 lbs. to Germany, and 1,905 lbs. to India.

CASCARA SAGRADA.—For a parcel of 42 bags bold clean bark 23s. was the "buying-in" price at auction. Privately the market is quiet and unchanged. The *Pericles*, from San Francisco, has brought 463 packages.

CASCARILLA.—A bid of 42s. per cwt. for fair chips was rejected.

COLOCYNTH.—Neglected at auction. Good pale Turkey apple, part broken, is limited at 1s. 4d., though a shade less might be taken. For good Spanish pulp 3s. 6d. was asked.

CUBEBS.—New berries were in large supply at auction, and quite neglected. Good clean grey to black berries are limited at from 35s. to 40s. per cwt. A few bags of small shrivelled berries sold "without reserve" at 29s. 6d. to 30s.

CUMIN-SEED.—Thirty bags of fair clean seed sold to-day at 22s. to 22s. 6d. per cwt.

CUTTLE-FISH.—Five bags common dark and damaged sold at 1d. per lb. Ordinary dull is held for 3½d.; and good pale at 4d. per lb.

DRAGON'S-BLOOD.—Fine quality is still scarce, and medium to fair bold cake was sold at 5l. 15s. per cwt.

FENNEL.—Eight bags of good Maltese seed sold at 6s. 6d. per cwt.

GENTIAN.—For dark bold unsplit root 24s. per cwt. was accepted at auction.

GOLDEN-SEAL ROOT.—Six bags of fair quality are held at 1s. 10d. per lb. The New York market is bare.

GUM ARABIC.—Very little was offered to-day. Good Turkey sorts are held for 85s., and picked at 7l. per cwt.

HONEY.—Quiet. Eight packages of good Jamaica, crystallised, sold at 20s. to 22s. per cwt.

IPECACUANHA.—A dull but firm market. Of Rio root, 47 bales were offered, but only 2 sold at 8s. to 8s. 1d. per lb. for fair wiry root, the majority being bought in at 8s. 6d. per lb.

KOLA-NUTS.—One barrel dull African sold at 2¼d. per lb. Another lot brought 2½d. per lb., subject to approval; and for 3 barrels of dark and wormy, 1d. per lb. was bid and refused.

MUSK.—One caddy of pile 3, thin-skinned pods, a few broken and pasty, sold at 43s. per oz., subject to approval.

OIL, LINES.—West Indian oil sold at auction to-day at 3s. 5d. to 3s. 7d. per lb. This is a high price considering the quality of the oil, but the crop this season is poor.

ORANGE-PEEL.—Six bales of dark Maltese strips sold at 7½d. per lb.

ORRIS-ROOT.—Two parcels of 70 bags Florentine were offered and 50 sold, at from 40s. to 41s. per cwt. for good white picked, and 29s. down to 27s. for common, slightly sea-damaged. Mogador was bought in.

QUINCE.—Five barrels of good seed were sold at 1s. 2d. to 1s. 3½d. per lb.

RHUBARB.—Very little demand was shown at auction. For good, round, bold Canton 1s. 9d. per lb. was refused, the parcel being limited at 2s. 3d. Small druggists' root of dark fracture sold at 1s. 5d.; flat at 1s. 1d. to 1s. 2d. Shensi, round and flat, of good colour, sold at 1s. 2d. per lb., and rough pickings at 1s.; round High-dried, of rough coat, two-thirds pinky and one-third grey fracture, realised 8d. per lb.

SARSAPARILLA.—The offerings to-day included a new arrival of 12 serons of Honduras of very fine quality; it is held for 2s. per lb., a bid of 1s. 9d. being rejected. Lima-Jamaica did not sell; 43 packages have arrived this week per *Arcon* from Jamaica.

SENNA.—In small supply at auction. Medium to dull and spotty Tinnevely leaf sold at from 1½d. to 2¼d. per lb. Fair leaf was mostly bought in at 3d. per lb. One parcel of bold leaf, but not at all first quality, sold at 4½d. to a whistling chorus.

SQUILLS.—Sales of fair brown quality were made at 1½d. per lb.

TONCA-BEANS.—Good frosted Pará sold at 1s. 3d. per lb., and ordinary mixed foxy at 6d. For 1 case bold, frosted Angostura 4s. was bid, and refused.

TRAGACANTH.—All kinds except the finer qualities are firmly held, and in good demand. At the drug-auctions three bags of dark Bassora gum sold at 29s. per cwt.

VANILLA.—In moderate supply at auction, 197 tins being offered and mostly sold. Good to fine fresh and slightly cry tallised chocolate, 7 to 8 in., realised 20s. 6d. to 23s.; 7 to 7½ in., 20s. to 21s. 6d.; 6 to 6½ in., 19s. to 20s. 6d.; 4½ to 5 in., 18s. to 18s. 6d. Tahiti were bought in at 8s. per lb.

WAX.—Jamaica sold well at auction, practically the whole of the offerings selling at easier prices. For pale to good medium colour 7l. to 7l. 5s. was paid; fair pale to dark, and part wormy, realised 7l.; Australian, of good colour, sold at 6l. 15s. per cwt. One bag of Rhodesia, in small bulbs, free from dirt, sold at 6l. 2s. 6d. Six packages Madagascar sold at 6l. 7s. 6d. per cwt., a higher rate than last sales. The Calcutta, Zanzibar, and Italian was bought in.

Heavy Chemicals.

The market is quiet and there is little fluctuation, but there are indications of an improvement at an early date. Inquiries for spring shipment are fairly good and are becoming more numerous. The home trade is moderately steady, and a somewhat better demand exists. *Bleaching-powder* is in request for export, and the price is firmly maintained at 6l. to 6l. 5s. per ton for hardwood casks, f.o.b. Liverpool. Softwood casks on rails makers' works vary from 5l. 5s. to 5l. 10s., although lower figures would be accepted for contracts made to the end of next year. *Caustic soda* is firmer and in heavier demand, 76 to 78 per cent. 8l. 12s. 6d. to 8l. 17s. 6d. per ton, f.o.b. Tyne or Liverpool; 70 per cent. 7l. 10s., 60 per cent. 6l. 10s., 60 per cent. cream 6l. 5s. to 6l. 10s., f.o.b. Liverpool. *Soda crystals* keep very firm and are scarce. *Alumino ferric* meets with better inquiry, and now stands at 2l. 3s. 6d. to 2l. 5s. *Benzols* are steady at somewhat higher figures, 90 per cent. 1s. 4d., and 50 per cent. 1s. 6½d. *Sulphate of copper* is also a shade firmer, but the only alteration from last quotations is in Liverpool, which has advanced to 16l. 15s. *Sulphate of ammonia* is weaker, and prices have declined 2s. 6d. per ton. Exports from Leith last week were fairly heavy, amounting in all to 857 tons. *Yellow prussiate of potash* is weaker, best Lancashire makes however, are fairly active at 6½d. to 7d. per lb. *Chlorate of potash* weak; London, 3½d.; Liverpool, 3¼d. per lb. *Phosphorus* moves steadily, sticks, 2s. 1d.; wedges, 2s.; amorphous, 2s. 8½d. per lb. *Sal ammoniac* remains firm at recent

advance. *Lead* compounds maintain a firm tone, foreign white *Acetate*, 23l.; English, 26l. 5s.; brown, 18l. *Nitrate of lead*, 20l. 15s. *Green copperas* in fair inquiry; best Lancashire makes 37s. to 38s. per ton, f.o.b. Liverpool; Welsh 28s. 6d.

The Liverpool Drug-market.

Our Liverpool correspondent writing on February 16 reports that the market for *Castor oil* has improved materially. There is a better demand on the spot. Owing to the resumption of work by the engineers, and the stiffening of prices to arrive, there is every indication of higher prices soon. Good seconds Calcutta are held at 3½d. per lb., and first-pressure French at the same price, while second-pressure French, Madras, and Bombay good seconds are entirely wanting. *Beeswax* continues to move upwards, and the small stocks of all kinds in Liverpool are in strong hands, there being nothing under 7l. in Chilian, and some holders are asking up to 7l. 15s. for fine grades. Sales of low grade African have been made at late rates. *Honey* is still attracting a good deal of attention, any sign of weakness on the part of holders being readily taken advantage of by buyers. Pile 3 Peruvian has sold at 23s. 6d. per cwt., marking a further advance. The new crop Sierra Leone *Chillies* are selling freely from the quay, one parcel of fine bright realising 43s. per cwt., and sales of slightly lower quality were made at 42s. per cwt., altogether 100 bags, while the rest of the arrivals found buyers at prices in the neighbourhood of 24s. to 25s. per cwt. Good dry *Kola nuts* have sold at 2½d. per lb. For *Gum Arabic* higher prices are wanted, and small sales have been made at 70s. per cwt. *Spermaceti* is firmly held at 1s. 3d. per lb. African *Ginger* has experienced a sharp rise, and it is doubtful if sellers could be found at 22s. 6d. per cwt., and much higher prices are spoken of. *Quillaia-bark*, after declining considerably, has evidently reached the bottom, and holders are very firm indeed, at 17l. per ton from the quay.

The Constantinople and Smyrna Opium-market.

Our Constantinople correspondent writes, on February 12, that the stock then in Turkey (Salonica included) is under 4,500 cases, which cannot be termed excessive. The 1897 crop turned out far below the original estimates made by most people, and it can safely be said that the full outturn has not exceeded the maximum of 7,000-7,100 cases. With regard to the present crop it is still a moot question whether the cold of two or three weeks ago did not entirely destroy what remained of the autumn plants. Under the circumstances, a large crop is out of the question. The general opinion on this side is that the utmost that can be expected is 4,000 to 5,000 cases. Snow is again falling heavily, and this will, no doubt, tend to harden prices once more. The future course of prices greatly depends on the available stock of opium in America, and the policy Americans intend to follow. Our Smyrna correspondent writes on February 5, that sales for the week amount to 10 cases Karahissar at the parity of 8s. 3d. to 8s. 5d. per lb., f.o.b. Smyrna, and three cases current talequale at 8s. 4d. Several lower offers, made by exporters, have been refused. The arrivals to date are 3,290 cases, against 2,180 cases at the corresponding period of last year. It is the opinion at Smyrna that lower prices will be seen, as speculators have retired from the market, and holders would be very willing to realise present high values in order to make progress with stocks. The market closed quiet.

TONCA BEANS.—Venezuela exported 130,985l. of these beans in 1896, and 11,000 gallons of rum was used in curing them. All but 1,091l. worth of the beans went to the United States.

AN INTERESTING LIGHT on irregular medical practice in New South Wales is shed by a statement in the *Australasian Medical Gazette*, which has been told by the Premier that an "irregular advertising practitioner waited upon a former Prime Minister and asked him to block a Medical Bill then before Parliament, remarking that 'it costs me 1,500l. or 1,600l. every time that beastly Bill comes on, and now I cannot afford it as well as I used.' The Premier was so agast that to obtain confirmation he sent him to another Minister, to whom the man repeated the statement in an even more emphatic manner."

Correspondence

In writing letters for publication correspondents should adopt a concise, but not abbreviated, style. They are requested to write on one side of the paper only. Letters, with or without a nom-de-plume, must be authenticated by the name and address of the writer. Queries should be written on separate pieces of paper, and the regulations printed under the sections to which they apply should be strictly observed.

Notice to Correspondents.

Chinese Aniseed Oil.

SIR,—My China friends report by last mail as follows:—"A Mandarin in the Lungchow district has confiscated and burnt a lot of 20 piculs of aniseed oil adulterated with kerosene oil."

This is the best news we have received from China for some time, and if all Mandarins would act in the same stringent manner, this and other articles would soon recover their old standard.

Yours faithfully,

53 Leadenhall Street, E.C., THEODOR SCHNEIDER.
February 16.

Bacteriology for Pharmacists.

SIR,—Allow me to correct your editorial foot-note. The report I referred to was "The Sterilisation of Water by Filtration," by Joseph Lunt, B.Sc., F.I.C., &c. The work was conducted in the water-laboratory of the British Institute of Preventive Medicine, and is recorded, as I stated, in the Transactions of the Institute (first series) recently published.

Yours faithfully,

285 Brockley Road, S.E. L. W. ATKINSON.

[Mr. Atkinson's reference at the meeting to a report published "a few weeks ago" naturally suggested Drs. Woodhead and Wood's report, Mr. Lunt's having having been published in October last.—Ed. C. & D.]

A Graphic Acknowledgment.



FRED. REYNOLDS (Leeds).

LEGAL QUERIES.

83/23. *Quærens* queries the justice of the decision in the case of the errand-boy who smashed a plate-glass window, reported on page 244 of our issue of February 5. He says in a heard in London not long since the Judge ruled that if the insurance company took the premium they must also take the risk. [They did so in this case. But if it could be shown that someone else was responsible there can be no

reason why the injured party (even if that party be an insurance company) should not recover.]

89/70. *Twenty-five Years' Subscriber*.—You must give a month's notice. Having paid the assistant weekly makes no difference. The "custom of the trade" is the guide.

92/25. *W. T. B.* asks if, being competent to undertake analyses, he can style himself "analytical chemist," though he is not registered under the Pharmacy Act? [If he so styles himself for the purpose of practising as an analytical chemist solely he will not be interfered with, but he will not be allowed to use the title if he carries on a chemist and druggist's business.]

95/48. *Phosphorus*.—An assistant must give a month's notice if no specific arrangement was made.

94/7. *Nicol*.—We replied to a similar question last week. A druggist who is a licensed wine and spirit dealer is not obliged to close his premises when licensed houses simply are closed, provided he does not sell or expose for sale any alcoholic beverages during prohibited hours.

92/11. *Farmer*.—A farmer has a cattle-oil recipe which he gets made up for him by a chemist. It contains a small quantity of laudanum. May the farmer sell it, if it is duly labelled with the chemist's name on the label? [No. The actual seller of any scheduled poison must be a registered chemist and druggist.]

94/63. *Ebor*.—If you make your coca wine without any alcoholic menstruum you can make it by any formula you please so far as the Excise authorities care. You may call it coca wine without incurring the liability to take a licence. You may render it liable to medicine-stamp duty by label or advertisements—as for instance, if you claim a proprietary right in it or recommend it for human complaints.

93/11. "*X*" *Ray*.—We think the analyst's certificate so associates the pills with you as the maker as to constitute a proprietary claim, which would render them liable to medicine-stamp duty. But it is a very doubtful case, and you can only get an authoritative opinion from Somerset House.

94/74. *Inquirer*.—A licensed vendor may open a stamped packet of pills or powders, and retail out the contents, provided that the retailed portions are merely wrapped in paper, and not made into a new packet.

MISCELLANEOUS INQUIRIES.

We reply to our subscribers and their employés only; queries must, therefore, be authenticated by the name and address of the subscriber. When more than one query is sent write each on a separate piece of paper. When a sample accompanies a query full particulars regarding the origin and use of the sample must be given, and the name of the querist should be placed on the sample. Queries are not replied to by post.

86/58. *Rats*.—(1) It is a popular idea that there is a rat-poison which "dries up" the dead vermin, but not true in fact. (2) When arsenical rat-poisons are sold the provisions of the Arsenic Act require observing. (3) Chloride of barium is recommended for poisoning rats, and is not a scheduled poison. It is not, however, consequently harmless. (4) Phosphorus-paste is perhaps the most efficacious non-scheduled rat-poison. (5) We have no formula by us.

88/33. *Alpha*.—To bleach the faded white feathers they should be first washed with soap and water, and afterwards exposed to the fumes of burning sulphur.

85/96. *J. T. D.*—The furniture-paste shrinks from the box on account probably of evaporation of the turpentine. The paste when poured into the boxes should not be allowed to cool too rapidly.

83/61. *Curious*.—Legg's "Examination of the Urine," 2s. (Lewis), is the most suitable book for you.

83/27. *J. R. P.*—(1) *Capsuling-solution*.—Add to the formula, *C. & D.*, September 26, 1896, page 504, $\frac{1}{2}$ oz. potass. bichrom. previously dissolved in 4 oz. water. After capping

the bottles with this solution they are exposed to a strong light for a time. (2) Vin. antimonialis is not a scheduled poison.

83/23. *E. W. D.*—**Composition-powder.**—See THE CHEMISTS' AND DRUGGISTS' DIARY, 1897, page 481. **Composition-essence.**—See *C. & D.*, October 9, 1897, page 605.

84/1. *G. T.*—The basis of the pessaries is ol. theobromatis. The quinine is mixed with a sufficiency of the melted fat, and poured into the moulds whilst still fluid.

193/34. *H. M. S.*—Powdered colocynth is used as an odourless and effectual **Moth-powder** for silks and furs.

89/36. *E. H. R.*—(1) **Indigestion-mixture** :—

Bismuth. carb.	...	...	...	℥ss.
Sodii bicarb.	...	...	...	℥ss.
Pulv. tragac. co.	...	...	...	℥ij.
Spt. amm. arom.	...	...	...	℥iss.
Aq. chloroformi ad	...	...	...	℥j.

℥ss. ter in die ante cibos.

(2) There are many anodynes other than morphia your wife could use for acute neuralgic pain of the stomach, such as aconite, belladonna, hyoscyamus, or camphor. (3) You exceeded the temperature laid down in the B.P. in making your lin. saponis, causing it to gelatinise. Make another batch with less soap, and mix with the jellied liniment.

89/37. *A. E. C.*—We presume the crab-apple essence you inquire about is a solution of acetic acid, and that of course will not mix with turpentine.

89/50. *F. J. H.*—White shellac is kept in water to prevent it becoming insoluble in spirit. In time, however, it becomes insoluble even when this precaution is observed.

89/25. *Sperans.*—**Bay Rhum.**—See *C. & D.*, December 25, 1897, page 1005.

89/23. *S. L.*—A reply to your query has been in type for some time, but has had to be held over.

89/52. *N. B.*—Lime in the B.P. is to be of a "whitish colour," which seems to include a light-grey colour, such as you say it is in your district.

83/6. *R. J. H.*—**Pink Manicure-powder** :—

French chalk...	...	...	...	℥ij.
Putty powder	...	...	...	℥ij.
Carmine	...	...	...	gr. viij.

Mix.

83 17. *Dentist.*—(1) We have heard of embryo-dentists practising on the teeth of a sheep's head, so as to acquire confidence. You can hardly blame living subjects objecting to be practised on. (2) **Training of Nurses.**—Nurses are seldom accepted as probationers until they are 21 years of age; they then work in the wards as probationers for from one to three years at a salary of 15*l.* to 20*l.* The work they are required to do is of the roughest description. At the expiration of their probationership they are eligible as nurses at somewhat improved salaries. (3) According to Hager, Ruspini's styptic is composed of—

Tannic acid	...	...	...	5
Rose-water	...	...	...	120
Rectified spirit	...	...	...	10

Mix.

but, as you are aware, it is a proprietary article, the formula for which has not been published as far as we are aware.

87/71. *Dubitat* put 6 gr. of cocain. hydrochlor. in a 12-oz. bottle of coca-wine and sent it to the Inland Revenue, who say it only contains $\frac{1}{4}$ gr. to the ounce. Our correspondent wants us to give him a formula which will come out better on analysis. We can only say that it is too risky to attempt to construct formulæ which are subject to such erratic analysis.

87/55. *Jacobus.*—(1) Chlorine is used for bleaching sawdust in some manufactures, but is a wet process. It is generally done by mixing with solution of chlorinated lime, and adding subsequently an acid to liberate chlorine. (2)

Brazing formulæ are prepared by melting together the metals and when cool powdering. The nitric and oxalic acids in the recipe you send are quite extraneous. (3) A trace of burnt-sugar or Bismark brown is put in milk to give it a rich creamy colour. (4) **Insect-powder** :—

Powd. pyrethrum	...	...	...	℥viij.
Cedar sawdust	...	...	...	℥viij.
Camphor	...	...	...	℥j.

Mix.

92/67. *Mona.*—We cannot, of course, say the definite (outdoor) salary a Minor man should have for taking charge of a branch, on the meagre details you give. It may be anything from 100*l.* to 300*l.*, depending much on the man and kind of business he would have charge of.

90/19. *D. J. W.*—The headache-tablet never reached us.

90/73. *Blooming.*—The **Condition-syrup** for dogs is the one we published January 1, 1893, page 30.

INFORMATION WANTED.

The Editor will be obliged for replies to the following from any who can furnish the information

246/17. Maker of grease-paint labelled "Rose Fin Vif de Théâtre, Paris."

93/58 asks for name of makers of the "Imperial" india-rubber douche, and where china spoons with elongated spouts, for using in place of acid-tubes for taking medicines, can be obtained.

91/48. Where can "Dodson's Drinks" be obtained?

10/2, 98. A correspondent asks if any chemist can confirm an observation he has made that a mixture of formaldehyde and salicylic acid used as a preservative develops the odour of carbolic acid on keeping.

**** Owing to great pressure on our space this week we are compelled to hold over several pages of correspondence.**

Coming Events.

We insert notices of association and society meetings in this section free if they are sent to us, on postcards, by the Wednesday of the week before the meetings are to be held.

Tuesday, February 22.

Royal Photographic Society, 12 Hanover Square, at 8 P.M. "Photographic Manipulation in Radiography." By Mr. A. W. Isenthal.

Bradford and District Chemists' Association, Great Northern Victoria Hotel, at 9 P.M. Lecture by Mr. W. M. Gardner, F.C.S.

Wednesday, February 23.

Midland Chemists' Assistants' Association, Exchange Restaurant, Birmingham, at 9.15 P.M. Short Papers by Members.

Brighton Junior Association of Pharmacy, Newburg Hall, at 9 P.M. Short Papers by Messrs. S. Ching and A. S. Kent.

Society of Arts, John Street, Adelphi, W.C., at 8 P.M. "Children's Sight." By Mr. R. Brudenell Carter, F.R.C.S.

Thursday, February 24.

Chemists' Assistants' Association, 73 Newman Street, W., at 9 P.M. Discussion on Trades Unionism in Pharmacy Opened by the President. A resolution will be moved concerning the new Pharmacy Bill.

Friday, February 25.

Aberdeen Junior Chemists' Association, 21 Bridge Street, at 9.30 P.M. Concert.

Edinburgh Chemists', Assistants', and Apprentices' Association, at 36 York Place, at 9.15 P.M. "The Simpler Plants and Animals," with illustrations, by Mr. G. Senter.

Public Dispensers' Association, Bloomsbury Hall, Hart Street, W.C., at 8 P.M. Inaugural address by Dr. Macnaughton Jones.